

Public Utilities

FORTNIGHTLY

Volume 53 No. 11

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May 27, 1954

WHAT DO THE PANHANDLE AND PHILLIPS CASES MEAN?

By Edward Falck

The Gas Industry's Problems from the Investor Viewpoint

By Stuart F. Silloway

Will "Cybernetics" Do Away with People?

Is Manufactured Gas Coming Back?

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WHITE 3000!

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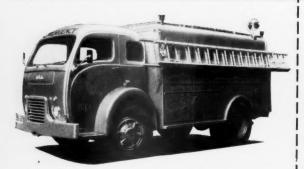
DUMP TRUCK work handled by this White 3020 requires best maneuverability in congested areas, among elevated pillars, in garages. Used for coal, asphali, sand gravel and debris.



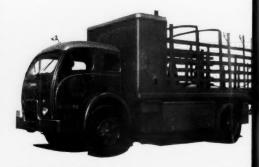
POWER DEPARTMENT handles crew and equipment with real savings in overall length with this White 3000 with extra crew compartment.



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Annual Subscription Price

United States	and pos	sessions					\$15.00
Pan American	countrie	s					\$15.00
Canada \$16;	all other	countrie	:8				\$17.50

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936. Copyrighted, 1954, by Public Utilities Reports, Inc. Printed in U. S. A.

Public Utilities

FORTNIGHTLY

VOLUME 53

MAY 27, 1954

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PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial & Advertising Offices MUNSEY BLDG., WASHINGTON 4, D. C.

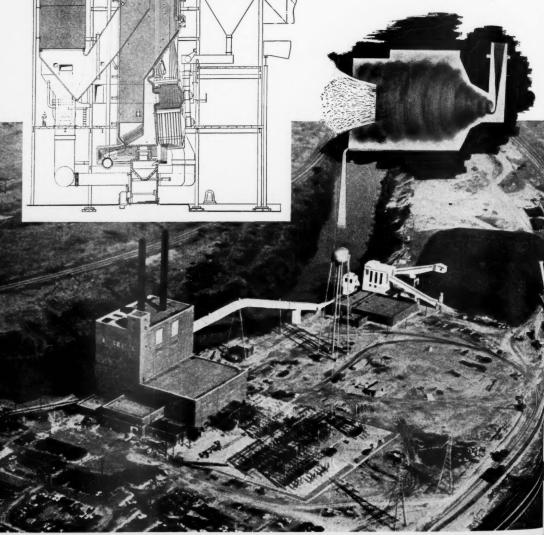
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New B&W Pressurized

on the line a

B&W Radiant Boiler with Cyclone Furnaces, Pressure-Firing, Cyclone Steam Separators and Reheat for the Niles Station of Ohio Edison Co. Each of the two units in this station has a maximum continuous steam capacity of 885,000 lb per hr. Design pressure is 1650 psi, with pressure at superheater outlet 1485 psi. Final steam temperature is 1000 F with reheat to 1000 F.



a NILES STATION

Reflecting the need for additional power facilities in the area it serves, Niles Station is a tribute to the foresight of executives of Ohio Edison Company and its consulting engineers, Commonwealth Associates, Inc. Built into this new station are many technical advances to achieve economical construction costs while assuring efficient long-range power generation. For example, the two B&W Boilers for Niles Station, the first of which is now on the line, incorporate such engineering features as:

Cyclone Furnaces for efficient use of low grade coals, with provision for burning oil or gas when conditions warrant.

Pressure-Firing, with elimination of induced draft fans.

Cyclone Steam-Separators for natural circulation and high-purity steam to the turbine.

High superheated and reheated steam temperatures.

Elimination of Heavy Fly-Ash Discharge with Cyclone Furnaces

Cyclone Furnace Boilers offer many advantages. One important feature is the elimination of heavy fly-ash discharge from the stack. Most of the ash from the burning coal is melted into easy-to-handle slag right in the Cyclone Furnace. This ash never gets into the gas stream, with the result that dust loading to the stack is reduced to very small amounts... often less than that specified by dust loading codes. The Cyclone Furnace offers many other benefits. Through simplification of the entire process of coal preparation, combustion, ash segrega-

tion, and ash handling, it makes possible economies in initial cost, operating labor and fuel consumption. Maintenance costs are cut because so much maintenance-causing machinery is eliminated.

Higher Efficiency, Less Maintenance Through Pressure-Firing

Lower fuel consumption, easier operation, and less maintenance are made possible by pressure-firing and the elimination of induced draft fans. There is also a savings in auxiliary power consumption since the forced draft fan alone requires less power than that needed for a combination of forced and induced draft.

Positive Circulation, Clean Steam with Cyclone Separators

Adequate circulation of water throughout the unit is assured with safety by B&W's efficient Cyclone Steam Separators. Located inside the drum, these simple, stationary devices require no power, need no maintenance, do not take up building room. In conjunction with Steam Scrubbers, the Cyclone Separators make it possible to send steam of highest purity to the turbine, contributing to greater turbine efficiency and decreasing the amount of turbine cleaning required.

These and many other modern advances in combustion and high-pressure, high-temperature steam generation are available to you. We will be glad to discuss them with you in connection with your future plans. The Babcock & Wilcox Company, Boiler Division, 161 East 42nd Street, New York 17, N. Y.



Pages with the Editors

As this issue goes to press, the U. S. Supreme Court had not rendered its decision in the controversial Phillips Petroleum Company Case, which has been under advisement since April 6th. Since there was a chance that the U. S. Supreme Court would hand down such a decision just before the distribution of this issue, we find ourselves possibly caught in the limitations of editorial lag, which has long been an insoluble problem.

But, actually, what the Supreme Court may do about the issue in this or other regulatory questions is apparently not to be regarded as necessarily final. The issue in this case, of course, is whether the Federal Power Commission will be required to exercise regulatory control over independent producers of natural gas such as the Phillips Petroleum Company.

THE finality of U. S. Supreme Court decisions has twice been circumvented by direct congressional action in the 83rd Congress alone. First, there was the celebrated "Tidelands Act," returning title to offshore oil and gas deposits to the coastal states, after the Supreme Court had decided that the federal government had "paramount interest" in such property.



EDWARD FALCK



STUART F. SILLOWAY

Then, there was the recent "Hinshaw amendment" to the Natural Gas Act, exempting intrastate gas distributing utilities from the kind of FPC jurisdiction which had been upheld by the Supreme Court in its East Ohio Gas Company decision of 1950.

WITH all the political lightning in Congress playing around the question of regulating gas distributing facilities for ratemaking purposes, it would be a brave prophet indeed who would predict that, whatever the Supreme Court decides to do in the Phillips Case, it will necessarily stay that way. We recall that in 1950 the Democratic 81st Congress passed the Kerr Bill, which would have annulled FPC jurisdiction in such cases, only to have it vetoed by former President Truman. Looking in exactly the opposite direction, the Senate Interstate Commerce Committee has recently planned to hold hearings on the Ferguson Bill, which would require the FPC not only to exercise such jurisdiction, but to go back to its traditional original cost rate base approach—from which it recently departed in its Panhandle Eastern Pipe Line decision. In that case, the FPC majority adopted a "fair field price," for company-owned production, as a straight expense item.





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WITH these two opposite legislative viewpoints both still strongly represented in Congress, it is not unlikely that there will be more legislative repercussions, whatever the highest court may decide in the Phillips Case. Whether any actual law making will result in the 84th Congress (assuming it is too late to expect it from the 83rd) is much more debatable. But even such a general statement of the situation shows the close relationship between what the FPC did in its Panhandle Pipe Line decision and what the Supreme Court must decide in the Phillips Case.

It was for that reason that we asked a qualified expert to give us an analysis of the over-all picture, plus some comments on the outlook possibilities. Our expert is EDWARD FALCK, well-known Washington consultant. He may be better known to some of our readers as the former director of the Office of War Utilities during the days of the War Production Board. FALCK was born in New York city and educated at Columbia University (AB, '30; BS Engineering, '31; MS Engineering, '32; University Fellow, '32, '33). He was director of rates and research for TVA from 1933 to 1937, and special assistant to the vice president of Consolidated Edison Company of New York from 1937 to 1942. During World War II, he filled various posts with the War Production Board, culminating in his directorship of the Office of War Utilities in 1944.

THERE is no doubt that the demand for gas will increase substantially in the future through the addition of residential customers, even though the price of gas continues to rise. What standards do the insurance companies and other important institutional investors apply in determining their financial commitments in the various phases of the natural gas industry: production, transmission, and distribution? How do the legal restrictions on such investments apply and what has been the actual financial record?

IN his article beginning on page 652, STUART F. SILLOWAY, vice president for finance of the Mutual Life Insurance Company of New York, has taken a look



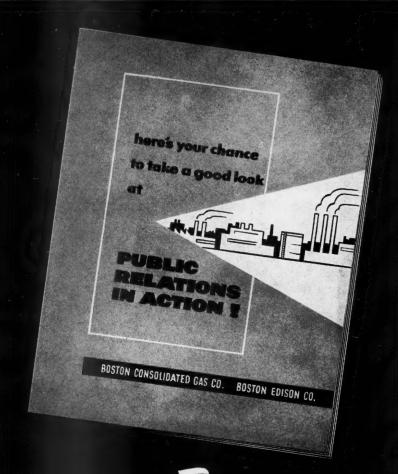
JAMES H. COLLINS

at the basic problems of the natural gas industry from the viewpoint of a life insurance executive. Mr. Silloway, whose article is a restatement of an address given at the last annual convention of the Independent Natural Gas Pipeline Association, is a native of Newburyport, Massachusetts. He is a graduate of Rutgers Preparatory School, and Wesleyan University. He began his professional career with Kidder, Peabody & Co., and joined the Mutual Life Insurance Company in 1933, rising to the post of vice president for finance in 1953. He lives in New York.

I is no secret and no joke that in this modern H-bomb and jet-speed age human beings are becoming obsolete in some respects. Planes fly faster than man can fly them and remain in one piece. Rockets go higher than living organisms can endure without elaborate protective equipment. The demands of modern science for lightning mathematical calculation have long made the machine more important and more accurate than its human inventor. In this issue, beginning page 660, JAMES H. COLLINS, business author of Hollywood, California, has looked in on some of the latest electronic brains-"cybernetics" - and other push-button equipment.

The next number of this magazine will be out June 10th.

The Editors



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We'd like you to have a free copy of the new twelve page booklet you see above. It contains some mighty interesting information for utility people.

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Coming IN THE NEXT ISSUE



WITH OPPORTUNITIES GO RESPONSIBILITIES

Walter H. Sammis, president of the Edison Electric Institute, explains the theme to be stressed at the twenty-second annual convention of the Edison Electric Institute at Atlantic City, New Jersey, June 1st to 4th.

THE LESSONS OF SEVENTY-FIVE YEARS OF SERVICE—A SYMPOSIUM

Here is testimony, on the occasion of the Diamond Jubilee of Edison's electric light, from seven veteran executives of the electric utility industry: Austin D. Barney, James B. Black, George M. Gadsby, H. P. Liversidge, James W. Parker, Frank M. Tait, and Eugene A. Yates.

ATOMIC POWER AND PRIVATE INDUSTRY

The Honorable W. Sterling Cole, U. S. Representative from New York and chairman of the Joint Congressional Committee on Atomic Energy, has given us a special statement on the importance of co-operation between the Atomic Energy Commission and the electric utility industry.

FEDERAL POWER POLICY

The Assistant Secretary of the Interior Department, Fred G. Aandahl, explains the attitude of the Interior Department in important policy interpretation affecting the relationship between the federal government and electric utilities.

OBSERVATIONS ON PRIVATE VERSUS PUBLIC POWER

One of the nation's leading electric utility system executives, Philip Sporn, president of the American Gas & Electric Company, makes a careful analytical study of the problems, past and present, in the controversy between public and private ownership. This is used as a background for pertinent comment on future outlook.

PARTNERSHIP PROVIDES SOLUTION TO NORTHWEST POWER SITUATION

The president of a group of Northwest electric utilities, Kinsey M. Robinson, himself a noted electric utility executive, explains their co-operative approach to the power supply problems in that area.

AN REA LOOK AT INDUSTRY CO-OPERATION

Ancher Nelsen, Administrator of REA, discusses the stakes involved and the present administration's attitude on the tasks still to be done in electrifying rural America.

A LOOK AT THE NEW FEDERAL POWER POLICY

E. Robert de Luccia, a former FPC engineer, now in private industry service, throws light from the engineering point of view on power policy questions, with special emphasis on what lies ahead.

HYDROELECTRIC POWER DEVELOPMENT UNDER FEDERAL LAW

The Honorable Jerome K. Kuykendall, chairman of the Federal Power Commission, recently made an important statement before the American Power Conference, which is presented in condensed text in the review department.



Also... Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.

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—Montaigne

CHARLES F. KETTERING
Director and research consultant,
General Motors Corporation.

". . . a cross-section education may be as good or better than knowing everything about one thing."

WILLIAM RANDOLPH HEARST Late publisher.

"Let us distinguish between the creation of wealth for the community and the extortion of wealth from the community."

SIR WINSTON CHURCHILL Prime Minister of Great Britain. "[There] is no country in the world where the process of self-criticism and self-correction is more active than in the United States."

SUMNER H. SLICHTER

Lamont professor of economics,

Harvard University.

"Conservatism does not consist of assuming that the most optimistic expectations will turn out. That is unwarranted gambling, not conservatism."

SINCLAIR WEEKS Secretary of Commerce. "Business has the money for the most creative and aggressive sales promotion in years. Spend that money today as an investment in tomorrow's sales."

HENRY B. DU PONT Vice president, E. I. du Pont de Nemours & Company, Inc. "Nothing must be allowed to handicap or impede the development of those industries which are essential to the national security and the national defense."

EARL C. BUNTING
Managing director, National Association of Manufacturers.

"If we are interested in the survival of our way of life, the average American must be made intelligent in regard to our economic system . . . in America, the job is to preserve incentives among all groups."

HERBERT HOOVER
Former President of the
United States.

"We could both cure the budget deficit and many of the pains of taxes without lessening our effectiveness in defense or in the needed functions of government if we could now have a period of self-denial and patience."

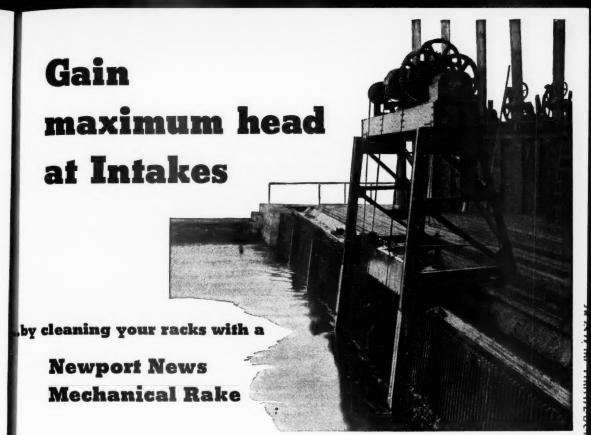
GEORGE ROTHWELL BROWN

Columnist.

"The spotlight of congressional investigation has been turned on a vast bureaucracy [federal housing], working in secret for twenty years, and conducted with all the signs of inefficiency that characterize government when it goes into political competition with industry and business under the American free enterprise system."

Excerpt from 1953 annual report, Pacific Gas and Electric Company.

"The democratic character of the ownership of modern corporations is often overlooked. Anyone, regardless of race, creed, or national origin, can freely participate in such ownership upon the purchase of a single share of stock. Yet, many apparently still believe that the privilege of stock ownership is restricted in some manner. A broader base for the ownership of American industry will do much toward a better understanding of our economic system."



Keeping racks clean is essential wherever a few inches of head loss can reduce output of the wheels.

One company calculated the capitalized value of each inch of head gained at its plant as \$6,000. Measured in terms of the value of additional power output, a Newport News rack rake installed at this plant is paying for itself over and over again the year 'round.

Power-operated to clean trash racks at water intakes of hydroelectric plants, steam plants, pumping stations, canals and similar installations, the Newport News Mechanical Rack Rake reduces a major hand-labor task to one of minor periodic activity.

Under ordinary conditions, one man per shift can, with a Newport News Mechanical Rack Rake, keep the racks clean for a dozen bays.



Write for your copy of
"RACK RAKE," an illustrated booklet describing the operation and advantages of the Newport News
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REMARKABLE REMARKS-(Continued)

RAYMOND MOLEY Columnist.

"... the purpose of taxation is to raise revenue. Fairness is an essential element, but fairness does not mean merely 'ability to pay.' This idea is a part of the Marxian expression 'from each according to his ability, to each according to his need.'"

Excerpt from New England Letter, published by The First National Bank of Boston. "The stage has been reached where definite steps must be taken to remove the farm economy from the strait jacket of regimentation and provide a system in keeping with the fundamental principles of private enterprise that will unleash the energies of free men, the most constructive force in the world."

RICHARD L. BOWDITCH President, Chamber of Commerce of the United States. "We used to think that the so-called cultural subjects could be left to the studious few; that most of us could learn one trade well and safely ignore all other branches of learning. Business has discovered that was a mistake. Today it is sending junior executives back to school to learn history and economics and sociology, or else it is importing educators to conduct classes in its own plants."

H. C. McClellan President, National Association of Manufacturers. "The statesmanlike employer sees to it that the good things he believes in are known to his employees, he encourages employees to develop new ideas and makes it clear that their suggestions are earnestly desired and will be adopted if they are worth while. He knows that employees must have an escape vent for their gripes. They must be free to speak their minds and, if they are right, to have something done about it."

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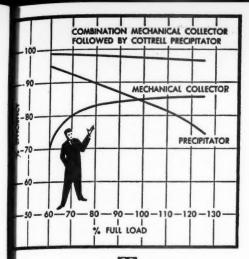
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ALLAN SHIVERS
Governor of Texas.

"It is my humble opinion that the framers of the Constitution did not intend to give any individual the right to use these privileges and freedoms on the one hand while trying to destroy them with the other. Just as religious freedom does not include the right to tear down your neighbors' church because you think yours better, political freedom should not be used to cloak the right hand with protection while the left hand carries on dastardly acts of destruction."

P. NICHOLS Treasurer, Atlantic Coast Line Railroad. "The prime example of subsidization is air transport in the United States. This is where 'subsidy' reaches the stratosphere, so to speak. . . . For example, the National Airport in Washington was constructed by the government at a cost of \$23,000,000. Commercial airlines contributed nothing toward its construction, and the property is tax exempt. The Washington Union Station was built by the railroads at a cost of \$27,000,-000 of their own funds and the annual taxes on the station property approximate \$350,000."

EUGENE S. LOUGHLIN Chairman, Connecticut Public Utilities Commission. "There can be no doubt that highly skilled men trained in the mass of detail which busies the commission should be available at every stage in the process of rendering decisions. But, it is one thing to urge the need for expert consultation at every stage in making policy; it is another thing and a very different thing to insist that the experts' judgment must be final. The expert sacrifices the insight of common sense to the intensity of experience. 'Experts,' said one observer, 'must always be on tap but never on top.'"



Advantages of the Western Precipitation

CMP Unit

for recovering solids from stack gases in public utility operations

The control and recovery of fly ash from stack gases has always been a troublesome problem in public utility operations. With the development of the CMP unit by Western Precipitation Corporation, new economy and efficiency in the solution of fly ash problems are now possible.

Almost a half century ago Western Precipitation oneered the first commercial application of the ow-famous Cottrell Electrical Precipitator to reover suspensions electrically, and this equipment still unsurpassed in its field.

Subsequently, to provide efficient fly ash recovery or low cost installations, Western Precipitation also ioneered the first small tube mechanical recovery nit — the Multiclone Collector — and this unit comptly gained widespread recognition for the ew efficiencies it brought to mechanical recovery

Combination Multiclone-Precipitator Unit. From hese years of experience gained in both Cottrell nd Multiclone installations, Western Precipitation cently offered another new development — the MP Unit — a unit that combines in one compact stallation many of the best features of both elecical and mechanical recovery methods.

In a typical CMP Unit, the stack gases first pass rough a Multiclone section where the heavier naterials are removed mechanically.

The partially-cleaned gases then pass through a ottrell section where the very small particles are emoved electrically.

This arrangement offers several advantages imortant to public utilities. Removing the heavier articles by the Multiclone process permits the ulk of the recovery operation to be performed

with relatively low-cost equipment. Using a Cottrell for the final clean-up insures unusually high recovery efficiency - approaching theoretically perfect, if desired. Thus, the CMP combines high recovery efficiency with low total cost . . . and, as shown in the chart above, has the further advantage that the efficiency curve of the Multiclone portion complements that of the Cottrell portion - therefore the overall CMP efficiency remains practically uniform at all boiler loads.

At low boiler loads the recovery efficiency of the Cottrell is highest, while that of the Multiclone reaches its maximum at high boiler loads. But, by combining the two types of equipment into a single CMP unit, the efficiency curve remains almost flat whether the boiler load is low or high.

With CMP equipment, even small utility companies can now afford adequate fly ash recovery. However, it is important to remember that full benefit of the CMP principle can be obtained only by a proper balance between the mechanical and electrical sections to fit the individual requirements of each individual installation. And no organization is better equipped to provide this critical "knowhow" than the organization that provides integrated responsibility for Cottrell, Multiclone and CMP methods ... the Western Precipitation Corporation.

his unique background of extrience in the solution of fly recovery problems is availble from our office nearest you. lay we give you more complete

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2. The modern, thrifty Silver Diamond engine that powers these Internationals saves money on gasoline

and oil . . . and its rugged all-truck design gives long-life performance at extra-low maintenance of

S. The sturdy, Tough-Job engineered chassis what it takes to take it . . . keeps trucks on the (Service-Utility bodies are available in 77 and 89-il lengths, for six truck models of 115 and 127-inch who base, and GVW ratings of 4,200 to 6,500 lbs.)

International Trucks with Service-Utility bodies money-makers, too... because they speed up work, he repairmen and installers do more jobs per day. Asky International Dealer or Branch for complete deta Time payments arranged.

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When the American housewife wants more electric power, she won't take no for an answer. Neither will industry in producing more and better products for every need.

That's why America's power companies, today doing the tremendous job of supplying an all-time peak demand, are at the same time planning . . . and building . . . for the still greater capacity that will be needed tomorrow.

Many utility companies have found that Ebasco can help them determine whether additional facilities are needed—where, what and when to build. Ebasco's specialized services to the electric power industry encompass every aspect of expansion—from studies of present and potential markets, long-range system planning, financing—right up through the actual design and construction of any type of new plant or station.

In its half-century of service to business and industry, Ebasco has served more than 145 electric companies covering every phase of operations. Our booklet, "The Inside Story of Outside Help," blueprints the value of this experience to your company. We will be glad to send you a copy. Write Ebasco Services Inc., Dept. W, Two Rector Street, New York 6, N. Y.





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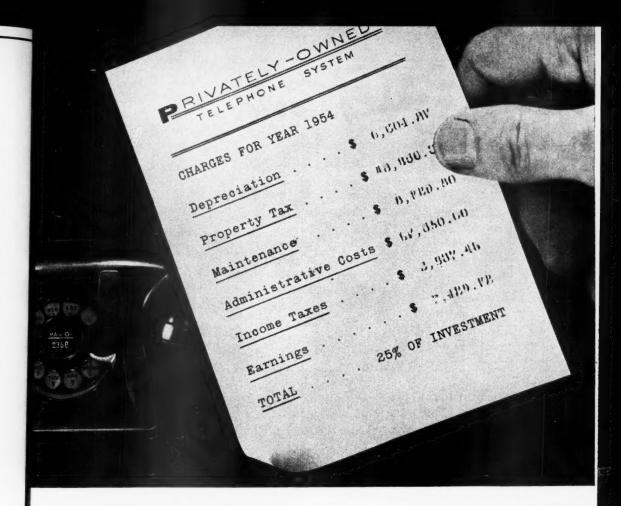
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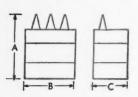


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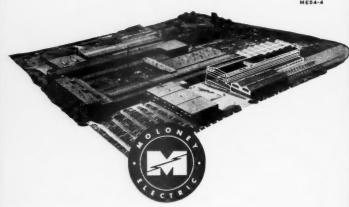
. The three dimensions for transformers in the blueprint stage, as shown in diagram, are A, B, and C, the physical measurements of a product. This product would be of little value to today's utility without the coefficient A, B, C of knowledge, facilities, and experience as basic elements of the manufacturer.



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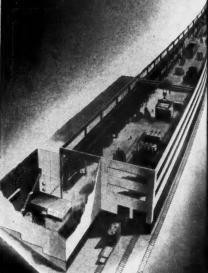


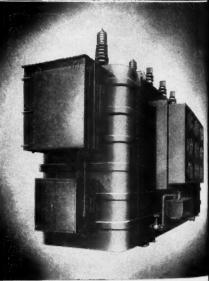
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PUBLIC UTILITIES FORTNIGHTLY-MAY 27, 1

UTILITIES A.l.m.a.n.a.c.k

MAY-JUNE

Thursday—27

Natural Gas and Petroleum Association of Canada begins meeting, Windsor, Ontario, Canada.

Friday-28

American Water Works Association ends 6-day annual conference, Scattle, Wash,

Saturday—29

National Association of Railroad and Utilities Commissioners will hold executive committee meeting, Washington, D. C. June 14. Advance notice.

Sunday-30

Canadian Transit Association will hold annual meeting, St. Andrews, New Brunswick, Canada. June 14-16. Advance notice.

Monday-31

Institution of Gas Engineers begins, Bournemouth, England.

JUNE

Tuesday-1

Edison Electric Institute begins annual convention, Atlantic City, N. J.

Wednesday—2

American Gas Association begins research and utilization conference, Cleveland, Ohio

Thursday—3

Controllers Institute of America begins western conference, Victoria, British Columbia, Canada.

Friday-4

Short Course in Gas Technology ends, Kingsville, Texas.

Saturday-5

Midwest Transit Association ends 3-day annual meeting, Wichita, Kan.

Sunday-6

National Association of Electrical Distributors begins annual convention, Atlantic City, N. J.

Monday-7

New York State Telephone Association begins annual convention, Schroon Lake, N. Y.

Tuesday-8

Public Utilities Association of the Virginias will hold accident prevention round-table conference, Roanoke, Va. June 18. Advance notice.

Wednesday—9

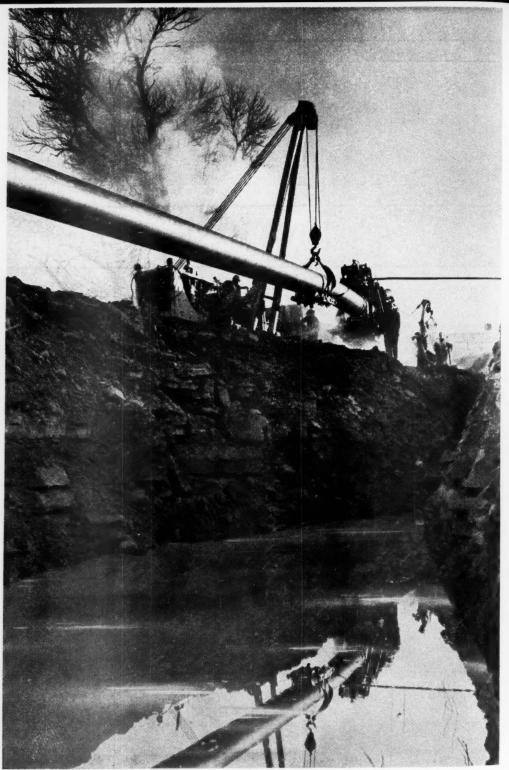
The Institute of Cooling Heat Appliance Manufacturers ends 3-day meeting, Cincinnati, Ohio.

Thursday-10

California Independent Telephone Association begins annual meeting, San Francisco, Cal.

Friday-11

Canadian Gas Association will hold meeting, Banff, Alberta, Canada. June 20-24 Advance notice.



Courtesy, Northern Natural Gas Company

Raincoat for a Pipeline

A 26-inch pipeline being painted and wrapped in preparation for lowering into watery trench.

Public Utilities

FORTNIGHTLY

Vol. 53, No. 11



MAY 27, 1954

What Do the Panhandle and Phillips Cases Mean?

Here is an interpretation of the industrial stakes involved in both the recent Panhandle Eastern Pipe Line decision by the Federal Power Commission and the equally important Phillips Petroleum Company Case, now under advisement in the U.S. Supreme Court. Both are part of the broader question of federal regulation of natural gas prices in the field.

By EDWARD FALCK*

THE issue of federal control of field prices charged for natural gas is an old one, going back as far as 1938 when the Natural Gas Act was passed. It was dealt with extensively in the Natural Gas Investigation, G-580, that was carried on during the years 1945 to 1948. Section 1(b) of the Natural Gas Act exempts production and gathering of natural gas from regulation by the Federal Power Commis-

sion. The conservation aspects of production and gathering are controlled by state conservation commissions in the producing states.

The crux of the controversy has been whether or not the Federal Power Commission does or should have control over the rate charged in the wholesale sale by the production company to an interstate pipeline company. Is this sale a wholesale sale for resale in interstate commerce and therefore subject to regulation by the Fed-

^{*}Utility consultant, resident in Washington, D. C. For additional personal note, see "Pages with the Editors."

eral Power Commission, or is it merely a sale that is incidental to the production and gathering activities of the natural gas producer?

The Federal Power Commission has taken various positions on this question at different times, although some members have followed a consistent course. Following the Interstate Case, and in order to assure independent producers and gatherers that it had no intention of regulating their arm's-length sales, the Federal Power Commission issued an administrative order, No. 139, on August 17, 1947.2 This was about the time that Congress was holding hearings on the Moore-Rizley Bill in the 80th Congress. This measure was intended to further clarify the exempt status of independent producers. The measure passed the House but failed in the Senate.

In the 81st Congress, the Harris-Kerr Bill, HR 1758, was passed by both House and Senate but was vetoed by President Truman. Thereafter, on July 11, 1950, the Federal Power Commission rescinded its administrative rule. The Kerr Bill was intended to make "crystal clear" the fact that Congress had not authorized the Federal Power Commission to regulate independent producers and gatherers or their "arm's-length sales" to interstate pipeline companies. The interpretation of the Natural Gas Act as presently written on this question of the precise jurisdiction of the Federal Power Commission is being tried in the celebrated Phillips Petroleum Company

Case, which is now pending decision in the Supreme Court of the United States, argument having been heard on April 6 and 7, 1954.

The Supreme Court has been asked to determine whether or not Phillips Petroleum Company is a "natural gas company" within the meaning of the Natural Gas Act. Should the court hold that FPC does have jurisdiction, and depending upon the scope of the language used by the court in announcing its decision, the FPC may have greatly enlarged powers extending to hundreds or even thousands of oil- and gas-producing companies. In short, there are great regulatory stakes involved in the Phillips Case.

When this matter was first considered by FPC, its staff took the position that the Phillips Petroleum Company was subject to Federal Power Commission jurisdiction. The commission itself decided otherwise on August 22, 1951, in Docket No. G-1148, with Commissioner Buchanan dissenting.3 This decision was appealed to the U. S. Circuit Court of Appeals for the District of Columbia by the state of Wisconsin, the Wisconsin Public Service Commission, and the cities of Detroit, Michigan; Kansas City, Missouri; Milwaukee, Wisconsin; and the county of Wayne, Michigan. Phillips Petroleum Company and several other intervenors took the same position as had been taken by the FPC. They were joined also by the state conservation commissions of New Mexico, Oklahoma, and Texas. However, on May 22, 1953, the U.S. court of appeals handed down a decision reversing the FPC and holding that Phillips is a natural gas company and that the com-

¹ Interstate Nat. Gas Co. v. Federal Power Commission (1947) 331 US 682, 69 PUR NS 1.

² The Priest Bill (HR 4099) was unanimously endorsed by FPC and the commission must have assumed passage of this bill. Pending its enactment, the FPC issued Order No. 139.

⁸ Re Phillips Petroleum Co. 90 PUR NS 325.

WHAT DO THE PANHANDLE AND PHILLIPS CASES MEAN?

mission should fix the rates at which Phillips' sales are made.⁴ This was a 2to-1 decision by Judges Edgerton and Prettyman, with Judge Clark dissenting.

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DURING the argument before the Supreme Court in the appeal from this circuit court of appeals decision, the Solicitor General of the United States maintained that Phillips' sales were merely an incident of its production and gathering activities. Justice Black asked "why then did Congress pass the Kerr Bill?" The Solicitor General replied that there had been fears expressed generally by independent producers and gatherers, based in part on the sweeping language of the court in certain opinions, that FPC was about to extend regulation to them by administrative order, and the Kerr Bill was intended to prevent this "perversion of congressional intent."

The Phillips Case is essentially a jurisdictional case. When the Supreme Court finally hands down a decision in this case, it will define more sharply than has been done before the extent of the jurisdiction of the Federal Power Commission over producers and gatherers of natural gas. Another equally important case, from the standpoint of its impact on federal regu-

lation of rates charged for natural gas in the field, was just decided by the FPC a few weeks ago. I refer to the FPC decision and opinion in the Panhandle Eastern Pipe Line Company rate case, Docket No. G-1116 et al., Opinion No. 269, adopted and issued on April 15, 1954.

THE most vital and far-reaching issue in the Panhandle Eastern rate case was the treatment accorded by the FPC of Panhandle's own gas production. Thus, during the calendar year of 1954, we are likely to see two history-making decisions affecting the business of natural gas production for sale in interstate commerce. These decisions will establish new and distinct guideposts for the natural gas industry with regard to the scope of federal jurisdiction and the manner in which it will be exercised.

The economic significance of the Federal Power Commission's decision in the Panhandle rate case can hardly be exaggerated. If, for example, the Supreme Court should sustain the circuit court of appeals in its holding that Phillips Petroleum Company is subject to FPC, and if such a decision extends FPC control over many hundreds of producers and gatherers, the rate-fixing policies of the FPC will become much more important to the economy of the country than they are

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"Unless there is some basic economic upheaval in the country, I would venture the prophecy that the new policy of the Federal Power Commission will result in substantial gains in ownership and production of gas by interstate natural gas pipeline companies . . . The only bar to early recognition by pipeline companies of the opportunities afforded to them by this Panhandle formula would be the fear that the position of the majority of the commission might be reversed in the courts or by Congress."

⁴ State of Wisconsin et al. v. Federal Power Commission, 100 PUR NS 506.

even today. This is because under the Federal Power Commission's historic ratemaking policies, natural gas companies under the jurisdiction of the FPC have had no real incentive to stay in the gas-producing business.

As was pointed out by this author in an article entitled "Impact of FPC Rate Regulation on Natural Gas Production" that appeared in the March 26, 1953, issue of Public Utilities Fortnightly, during ten years of FPC regulation from 1942 to 1952, there was a significant decline in the percentage of "gas produced" as compared to the percentage of gas produced and purchased by natural gas companies.⁵

THE study referred to showed that no single new major pipeline company going into operation after 1942 owned its own reserves. All of the new major pipeline companies depend entirely for their supply upon gas purchase contracts. There are fewer than 20 natural gas pipeline companies producing any substantial portion of their total gas requirements and the total production of all of these natural gas companies represents less than 15 per cent of all the gas now moving in interstate commerce.

However, if suddenly the Supreme Court should find that Phillips Petroleum Company and hundreds of other natural gas producers are subject to the rate jurisdiction of FPC, because they make sales at wholesale of gas that moves in interstate commerce for subsequent resale, then the crucial question will be "What

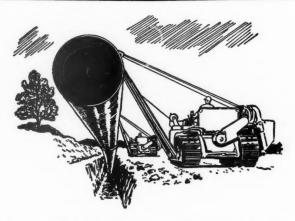
kind of rate-making policy should FPC follow in fixing the rates of these natural gas-producing companies?" Should FPC apply its historic rate base method of approach or should it follow some different formula?

What are the fundamental national objectives which should be a guide to FPC in establishing such a rate-making policy for gas producers? Is conservation of natural gas one of these national policies? Should FPC consider that it is an important part of national policy to encourage exploration and development? How should FPC balance the objective of creating an incentive for more exploration and production against the seemingly inconsistent objective of keeping rates down at the points of consumption to the lowest reasonable levels? These fundamental questions are taken up boldly and intelligently in the majority opinion of the FPC in the Panhandle rate case.

At the outset, the commission points out that Panhandle Eastern produces only about 23 per cent of its total requirements of gas. About 25 per cent is purchased from its affiliate, Trunkline Gas Company, and 52 per cent is purchased from others. The commission accepted as reasonable the cost of gas purchased by Panhandle under arm's-length gas purchase contracts. The average cost of these purchases was 7.7457 cents per MCF.

The commission pointed out that its own staff urged it to adhere to the traditional "rate base" approach. Under this method, all of the production properties are included in the rate base along with transmission, compression, and other facilities. They are included on the basis of net investment; that is, original cost

⁵ This situation has been referred to repeatedly in speeches and opinions by Commissioner Nelson Lee Smith. See, for example, his concurring opinion in the Northern Natural Gas Case, FPC Docket No. G-1618, issued June 24, 1952. 94 PUR NS 485.



Commodity Value versus Production Cost

development of gas, and its value as a commodity at the place where it is produced. Wide divergencies will be found to exist in the cost of gas in different fields, and in different wells in the same field. The cost of gas produced at a particular well has really no economic or logical relationship to the value or to the current competitive field price."

less accrued depletion and depreciation. Under the rate base approach, the company is permitted a fair return on its net investment plus all operating expenses, including expenses for exploration and development. However, against these operating expenses is charged all profits made from sale of liquid hydrocarbons, such as natural gasoline, and also all tax credits arising from depletion and intangible well-drilling expenses. The commission pointed out that to take away the benefits of these allowances would "clearly contravene the congressional policy and intent."

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Panhandle Eastern, in presenting its case, did not object to the application

of the net investment formula to its interstate transmission pipeline, compressor equipment, and related facilities. Nor does FPC give any indication that it would have gone along on any other basis, in so far as the pipeline transmission plant is concerned. All that it asked for was to have its production valued as a commodity rather than treated as if it were just the same as ordinary utility property. To achieve this result, Panhandle proposed that its gas reserves and production property be excluded from the rate base, and that all of its production expenses be eliminated from the operating expenses considered for rate-making purposes. Panhandle volunteered to assume the costs and the risks of natural gas production,

and at the same time to enjoy the special tax advantages provided for by law to encourage exploration and production of natural gas.

Panhandle showed in the evidence presented in this case that the approach suggested by the FPC staff would allow its investors less than nothing at all at the wellhead for the gas produced from Panhandle's own reserves. In fact, the uncontradicted evidence in the case showed that Panhandle incurred an annual deficit of more than \$900,000 a year, or 1.24 cents per MCF on the production of its own gas, if the staff approach were to be upheld. As an alternative to this approach, Panhandle proposed that the commission allow as an operating expense the "weighted average arm's-length" prices of gas at the wellhead in the fields where this gas is produced. The evidence in the record showed these prices at a pressure base of 16.4 pounds were 7 cents in the Panhandle field of Texas and in the Hugoton field, 8.4843 cents in Kansas, and 11 cents in Oklahoma. After adjusting for a change in the gas measurement price ordered by the Kansas Corporation Commission, the FPC found an average price of 8.4398 cents per MCF.

The commission noted also that the rates of royalties currently being paid by Panhandle to its lessors on its own production were 5 cents in Texas, 9 cents in Kansas, and 11 cents in Oklahoma. The commission noted further than the average arm's-length prices of gas purchased by Panhandle were well below the prices of recent gas purchase contracts that have been negotiated by others, such recent contracts ranging in price from 11½ cents to 15 cents, and even 20 cents per MCF,

in the Panhandle field of Texas and in the Gulf coast area.

The commission made reference to detailed studies of the difference in the method proposed by Panhandle and the method proposed by the commission staff for evaluating Panhandle's own production. The difference between the two methods yielded an over-all result which is 1.3 cents per MCF higher using the Panhandle method as compared to the rate base approach.6 If the comparison is limited just to the difference in the two methods of pricing without the further adjustment for tax benefits, the differential between the two methods comes down to only about 0.6 cents per MCF. Applying this small differential to typical residential consumption in the city of Detroit, say to a householder using an average of 18.7 MCF of gas per month for cooking, water heating, and space heating, the differential would come to 24.33 cents per month, or 1.6 per cent of his gas bill.

Throughout its opinion, the Federal Power Commission emphasizes two very important fundamentals. The first is that throughout all of the key cases, the Supreme Court of the United States has held that the process of rate making is necessarily experimental and subject to change so that the FPC should not be bound to follow any specific rule for all time, but must be free to exercise its expert judgment and analysis from case to case. The second is that primary attention should be focused upon the economic aspects of the question; i.e., "the economic functions of price as a tool of conservation or means of encouraging or discour-

⁶ This is approximately one-tenth the differential mentioned by Congressman Oakman in his attack on the use of fair field price. See *Congressional Record*, April 2, 1954, page A2546.

WHAT DO THE PANHANDLE AND PHILLIPS CASES MEAN?

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THE majority of the opinion is studded with quotations from the Colorado Interstate-Canadian River Case, the Hope Natural Gas Case, and the Colorado Interstate Gas Company Case. These quotations indicate clearly that the commission is free to adopt any reasonable method in fixing rates. Thus, at pages 24 and 25 of the opinion, the commission sums up in the following language:

. . . In the light of all these statements emanating from the Supreme Court it is clear that the question has always been an open one to be disposed of by the commission in the exercise of its administrative discretion under the Natural Gas Act. The issue is not a legal one; the commission is plainly free, as a matter of law, to deal with this economic matter in accordance with its experience and best judgment as to what constitutes sound public policy. Nor is it a new problem. It has been repeatedly recognized by various members of the Supreme Court; it was explored extensively in the commission's Natural

Gas Investigation (Docket No. G-580) 1945-1948. The question here presented is what method of pricing pipeline-produced gas will, under present-day realities and in the light of the facts of record in this case, best serve the ultimate public interest. . . .

The commission majority then concludes that the time has now come when the practices previously followed by the commission should be re-examined.

In demolishing the staff's argument in favor of applying the full force of the rate base approach to well-head production, the majority opinion did a masterful job of reductio ad absurdum — showing that the company would come out with less than nothing, on the same type of gas, from the same field, and often from the same wells as those on which independent producers were realizing a profit. It showed that the old fears of a "vanishing rate base," under circumstances of stringent enforcement of the net investment formula, with full deductions for depreciation, tax savings, by-product credits, etc., were not unfounded. It showed even the possibility of a negative (or minus) rate base on some elements under some conditions.

On this point the opinion goes back to



"The Supreme Court has been asked to determine whether or not Phillips Petroleum Company is a 'natural gas company' within the meaning of the Natural Gas Act. Should the court hold that FPC does have jurisdiction, and depending upon the scope of the language used by the court in announcing its decision, the FPC may have greatly enlarged powers extending to hundreds or even thousands of oil- and gas-producing companies. In short, there are great regulatory stakes involved in the Phillips Case."

^{7 (1945) 324} US 581, 58 PUR NS 65.

^{8 (1944) 320} US 591, 51 PUR NS 193.

^{9 (1942) 3} FPC 32, 43 PUR NS 205.

the record in the Panhandle Case and notes that while the rate base approach would give Panhandle stockholders a valuation of minus 1.24 cents per MCF at the wellhead on the natural gas produced by the company, in certain instances, Panhandle's partners in particular wells receive a gross price of 8 to 9.8 cents and earn from 5 to 5.6 cents, after all expenses and taxes. The commission concludes with these words:

... To us this is a situation of multiple pricing of gas from the same wells and going to the same consumers which just does not make economic sense.

The commission then points out that the consumers in the United States are coming to rely increasingly upon natural gas as a major source of energy, natural gas having grown from 4 per cent to about 20 per cent of the national energy supply. The staff rate base approach to evaluating natural gas reserves of natural gas companies tends to accelerate consumption because of the uneconomically low price that results and at the same time fails to encourage discovery and increased production.

THE commission also finds that ownership of natural gas production by pipeline systems would be in the interest of the public for several reasons, as follows: First, it would strengthen the bargaining position of pipelines in negotiating gas purchase contracts with independent producers. Secondly, it would help pipelines operate with greater uniformity and higher load factors; and, thirdly, an adequate supply at reasonable prices will be of greater long-term benefit to consumers than lower prices without

an adequate supply. The commission points out that it cannot legally compel natural gas companies to engage in exploration, drilling, and development, nor can it compel companies to acquire gas reserves discovered by others. Under certain circumstances, it has been held that it cannot even prevent a natural gas company from spinning off the gas reserves it already owns. Ocnsequently, if it is sound for pipeline systems to own reserves and producing properties, the policies of the commission must be designed to encourage rather than to penalize such activities."

THE concluding general statement of the commission on this all-important question reads as follows:

For all the foregoing reasons, we have concluded that, as a matter of sound public policy, we should re-examine at this time the treatment which the commission has heretofore accorded pipeline-produced gas in rate making. We are convinced, from our analysis of all the facts of record, that the ultimate public interest will be better served by permitting the pipeline to receive for the gas which it produces a price reflecting the weighted average arm's-length payments for identical natural gas in the fields (and sometimes from the very same wells) where it is produced than through the application of the "rate base" method to this commodity. We find that the uncontradicted evidence introduced by Panhandle in this proceeding represents a reasonable basis for such pricing. . . .

¹⁰ Federal Power Commission v. Panhandle Eastern Pipe Line Co. (1949) 337 US 498, 81 PUR NS



Net Investment Base Still the FPC Rule

THE Panhandle formula of current field price does not represent a reversal of the original cost formula established in the Hope Case, but rather a departure from this traditional original cost formula. In the Panhandle Case, the commission continues to use the net investment rate base for Panhandle's jurisdictional business; I. E., its transmission pipeline and compressor facilities. Thus the net investment rate base approach is not eliminated entirely. It is eliminated for production but retained for transmission."

WE have already touched upon the regulatory stakes involved in the Phillips Case. It is impossible at this time to determine with any accuracy the number of gas-producing companies that may be brought under the jurisdiction of the FPC as a result of the decision in this case. Assuming that the court holds Phillips to be a natural gas company, the decision may be interpreted to mean that FPC jurisdiction is extended only to companies similarly situated; or to companies owning gasoline extraction plants and engaged in processing as well as production and gathering; or to all very large production and gathering companies; or to companies that produce and gather but not to producing companies who sell at the well-

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head. Thus, if the scope of FPC jurisdiction is enlarged, it may affect a half-dozen very large companies, several hundred companies, or several thousand. Generally speaking, if FPC jurisdiction is extended, it will probably affect the bulk in terms of volume of natural gas but not necessarily in terms of the number of individual companies.

The Panhandle formula for rate making, as enunciated in the recent FPC opinion, does set the stage for FPC to assume the burden of jurisdiction over producers such as Phillips. It would be an extremely complex and difficult task for the FPC with its present overburdened staff to take over the job of fixing reasonable rates for natural gas producers if the cost for-

PUBLIC UTILITIES FORTNIGHTLY

mula as recommended by the FPC staff were to be the rule of rate making. Many of these producers are in the oil-producing business as well. Where gas is produced in association with oil, the determination of the cost of the gas as distinguished from the cost of the oil presents an extremely difficult problem. The cost cannot be specifically assigned; it must be imputed, attributed, or allocated. Such cost allocations are bound to be arbitrary and subject to wide variations, depending upon the fundamental assumptions made.

HERE is no functional relationship between the cost of discovery and development of gas, and its value as a commodity at the place where it is produced. Wide divergencies will be found to exist in the cost of gas in different fields, and in different wells in the same field. The cost of gas produced at a particular well has really no economic or logical relationship to the value or to the current competitive field price. Thus, if the Supreme Court decides that FPC must assume jurisdiction over producers, the Panhandle formula provides a simple, adequate, and sound rule for the commission to apply in its search for a standard against which to test the reasonableness of producers' rates.

The commission could not possibly apply the original cost rate base standard to these producers without causing tremendous reverberations and disruptions in the entire oil- and gas-producing industry. Not only would the work load be enormous, but the results would be, in the well-known words of Justice Jackson, "fantastic" and "delirious." We therefore conclude that the commission's action in the Panhandle rate case does set

the stage for a statesmanlike approach to the possible FPC assumption of jurisdiction over the rates charged by certain natural gas producers.

The Panhandle formula of current field price does not represent a reversal of the original cost formula established in the Hope Case, but rather a departure from this traditional original cost formula. In the Panhandle Case, the commission continues to use the net investment rate base for Panhandle's jurisdictional business; i.e., its transmission pipeline and compressor facilities. Thus the net investment rate base approach is not eliminated entirely. It is eliminated for production but retained for transmission. In reality, production of gas is treated as though it were a nonutility business. Thus, for the first time, gas production of a natural gas company is placed on an equal footing with gas production of independent producers and gatherers. This is as it should

The question will be raised at once as to whether the Panhandle doctrine will be extended to other pipeline companies producing from their own reserves. It is reasonable to assume that the FPC will agree to the application of this same formula to other natural gas companies if all the facts are in the record. In the previous Northern Natural Case (FPC Opinion No. 230, 94 PUR NS 485, June 24, 1952) the commission opinion pointed out that it would not accept the minimum price orders of state conservation commissions merely as a matter of law and unsupported by economic evidence in the record.

In the Panhandle Case, there was economic information in the record on (1) the weighted average arm's-length prices

WHAT DO THE PANHANDLE AND PHILLIPS CASES MEAN?

of gas at the wellhead in the fields where it was produced; (2) the rates of royalties concurrently paid by Panhandle to its lessors on its own production; (3) information on recent gas purchase contracts entered into by others in the Hugoton and Panhandle fields and in the Gulf coast area; and (4) the minimum price orders of the Kansas and Oklahoma commissions.

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After considering all of this evidence, the majority of the commission concluded that the weighted average arm's-length prices of purchased gas represented a reasonable commodity value for the pipeline to receive instead of the amount that would be allowed through the application of the rate base method. It seems clear that the majority of the commission will rule the same way in other cases where similar facts are presented.

The big question is whether the new Panhandle formula adopted by the commission will encourage pipeline companies to increase their discovery and development activities and to acquire producing properties. It is earnestly hoped that this will occur. Unless there is some basic economic upheaval in the country, I would venture the prophecy that the new policy of the Federal Power Commission will result in substantial gains in owner-

ship and production of gas by interstate natural gas pipeline companies, with correlative benefits to the consumers. The only bar to early recognition by pipeline companies of the opportunities afforded to them by this Panhandle formula would be the fear that the position of the majority of the commission might be reversed in the courts or by Congress. Such fears are not wholly without foundation. It does seem unlikely that the courts will reverse an administrative determination of the reasonableness of Panhandle's rates in view of the tremendous record in this case and the close and logical reasoning of the commission in its majority opinion.11

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"As other natural gas companies find encouragement for the discovery of reserves and the production of their own gas, their bargaining position will be improved, and they will be able to enter into more favorable long-term gas purchase contracts with independent producers than would otherwise be the case. Gas prices have risen precipitately in the field during the last five years."

¹¹ This conclusion is fortified by the language of the Supreme Court which is quoted in the opinion of the Federal Power Commission in the Panhandle Case, Opinion No. 269, issued April 15, 1954. Thus, in the Colorado Interstate-Canadian River Case (324 US 581, decided in 1945) the court stated as follows:

^{...} Congress of course might have provided that producing or gathering facilities be excluded from the rate base and that an allowance be made in operating expenses for the fair field price of the gas as a commodity. Some have thought that to be the wiser course. But we search the act in vain for any such mandate... We do not say that the commission lacks the authority to depart from the rate base method. We only hold that the commission is not precluded from using it. [Italics supplied.]

And again in the Panhandle Eastern Case (1945) 324 US 635, 58 PUR NS 100, the majority of the court said:

Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591 . . . holds that the commission is not bound to use any single formula for the fixing of rates. It is not precluded from using actual legitimate cost as it did here.

With respect to Congress, however, there has recently been introduced by Senator Ferguson in the Senate (S 3178), and by Congressman Oakman in the House (HR 8605) legislation which would make adoption of the original cost formula mandatory. Legislation of the type proposed ignores the fact that the original cost approach is a positive deterrent to gas exploration and development. The very fact that this type of legislation has been introduced may cause natural gas company managements to delay plans for going back into the business of natural gas production. Just as the historic policies of the FPC tended to drive interstate natural gas companies out of the natural gas production business, so the introduction of the Ferguson and Oakman bills may tend to deter them from re-entering the gas production business in spite of the favorable opinion of the FPC in the Panhandle rate case.

THE new policy of the Federal Power Commission in adopting fair field price or commodity value in the Panhandle Eastern rate case may give encouragement to those who have been urging that consideration and weight be given to the current level of costs in rate making, although the FPC opinion's emphasis on this point is in favor of adhering to historical cost for transmission facilities.

In many types of regulation affecting telephone and electric companies, as well as gas companies, regulatory commissions have been urged to consider trended original cost so as to give some recognition to the change in price levels from the time when investments were originally made in existing facilities. The FPC made it abundantly clear that its use of commodity value was limited to the production end of the business, and this was done largely because of FPC's recognition of the unusual hazards in discovery and development of natural gas. This end of the business is differentiable from the ordinary utility business. Consequently, the mere fact that FPC has recognized commodity value in fixing rates for natural gas produced in the field is not particularly persuasive in an argument as to the weight that should be given to current costs in the regulation of other types of utilities.

However, it is clear that the great disparity between the current level of field prices in the Panhandle and Hugoton fields and the results of the original cost application was one of the most significant reasons for the adoption of commodity value by the majority of the commission. It is safe to predict that where similar great disparities exist, reference will be made to the FPC majority opinion in this case.

The chances are that one or more of the intervenors in the Panhandle Case will appeal it, but, as was said above, it is doubted that the FPC majority will be reversed in the determination it reached on treatment of Panhandle's gas supply. Some reference has been made also in public discussion of this case to possible political repercussions that may be expected. Here it is well to point out a fundamental economic fact about Panhandle Eastern's gas supply and pipeline. At the extreme eastern end of its line, in its eastern zone, Panhandle Eastern's gas is relatively cheap gas.

At the city gate in Detroit, even

WHAT DO THE PANHANDLE AND PHILLIPS CASES MEAN?

after allowing fair field price for Panhandle's own gas production, the rate fixed by FPC consists of a demand charge of \$1.95 per MCF, and a commodity charge of 17.3 cents per MCF. At 100 per cent load factor, this comes to an average of about 24 cents per MCF. Notwithstanding the fact that FPC has granted Panhandle a fair field price for its self-produced gas, the resultant rate at the end of the line compares most favorably with the rates being charged by other interstate pipelines serving the same general area—pipelines that do not own gas reserves or producing properties.

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So far as the FPC staff is concerned, there should not be any real difficulty in going along faithfully with the position that has been so clearly and convincingly outlined in the majority opinion. The majority has not completely reversed the rate-making methods of the FPC, nor has it thrown away all of the traditions that have been established in previous cases over the years. On the other hand, the commission has gone along with the staff and the decisions of predecessor commissions on a great number of economic accounting and rate-making principles. The one big departure from the past relates to the treatment of natural gas production in rate cases.

What will the new Panhandle doctrine mean to the consumer over the short range and over the long-term fu-

ture? For the short range, it is clear, as the majority opinion pointed out, that the consumer will suffer a small increase in the price of gas. In the city of Detroit, this increase amounts to about 24 cents per month for a typical householder. For the long term, the consumer is bound to benefit greatly. This is because an adequate supply of gas in the years to come is much more important from the standpoint of convenience as well as cost in comparison with the cost of other fuels. The encouragement that the majority opinion has given to Panhandle Eastern Pipe Line Company will surely result in expansion of Panhandle Eastern's reserves and facilities.

s other natural gas companies find en-A couragement for the discovery of reserves and the production of their own gas, their bargaining position will be improved, and they will be able to enter into more favorable long-term gas purchase contracts with independent producers than would otherwise be the case. Gas prices have risen precipitately in the field during the last five years. Undoubtedly, gas prices will rise further, but the further increase in gas prices will be less and will take place more gradually now that interstate natural gas pipeline companies have been given assurance by the Federal Power Commission that their equities will be protected if they re-enter the field of natural gas production.

-HERBERT HOOVER,
Former President of the United States.

THE immediate medication is no further reduction of taxes than the administration proposals, and to systematically reduce government expenditures until the budget deficit is met. Then, and then alone, can inflation be stopped."

The Gas Industry's Problems From the Investor Viewpoint

This is essentially the story of how a life insurance executive looks at the financial, regulatory, and economic problems of the natural gas industry. The institutional investor is interested in every phase of the business: production, transmission, and distribution, as well as the long-range problems of reserves and supply and consumer relation.

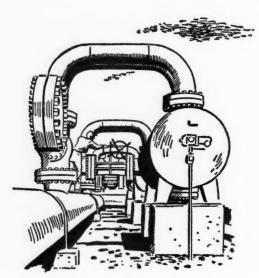
By STUART F. SILLOWAY*

HE life insurance industry, of which I am a representative, has a very substantial amount invested in the securities of companies in the gas industry, the major portion of which has been invested in the past ten years. I believe that only a microscopic portion of this amount of other peoples' money administered by life insurance companies would have been invested in the gas industry if

it were still dependent upon the old manufacturing process, and the increase which has occurred would have been replaced by a decrease of a size that would have been determined only by the ability of the companies to find someone to take their remaining holdings off their hands.

In short then, the present lofty investment status of the gas industry is due mainly to the discovery and development of large reserves of natural gas and the vision of the pipeline companies in making this gas available to persons residing

*Vice president for finance, Mutual Life Insurance Company of New York. For additional personal note, see "Pages with the Editors."



hundreds of miles away as well as nearby. With the construction of the pipelines, the pace of discovery, the development of gas reserves, and the utilization of gas produced in association with oil were all greatly stepped up. The widespread use of gas as fuel was, of course, greatly aided by improvements in the character and quality of steel pipe, the development of the present-day compressor station, the strengthening and modernization of distribution systems, and the wise conservation practices of state regulatory authorities in taking measures against the flaring of gas.

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WISH I could state the amount of money invested by life insurance companies in the various phases of the gas industry. Such a breakdown is not available but figures for my own company reveal that as of December 31, 1953, we had \$133,914,-312 invested in the securities of gas transmission companies, as compared with \$3,-750,497 on December 31, 1943, and \$45,-519,847 invested in securities of gas distribution companies as compared with \$1,-992,742 so invested at December 31, 1943. Management people within the gas industry have a better understanding than I of the fact that some companies are engaged in both transmission and distribution and that a breakdown such as that above is a matter of interpretation and therefore may not be precise in accordance with individual estimates.

This investment in the transmission and distribution phase of the gas industry takes the form of mortgage bonds, debentures, preferred stocks, and a small amount of common stock. In addition to these investments, my company has \$44,423,000 invested in gas-producing properties where

the gas is contracted for sale and delivery to a transmission line. As of December 31, 1943, we had nothing invested in this field. Our total investment in the industry, therefore, is approximately \$224,000,000 as compared with \$5,743,249 ten years ago. We feel that our investments in gasproducing properties, which provide funds for active producers or for the purchase of proven reserves, are extremely helpful in aiding the discovery and development of gas. From this picture of our operations, it will be seen that the institutional investor is interested in the entire keyboard of gas industry activities.

Since the bulk of life insurance funds invested in the gas industry is lodged with transmission companies, let me note some of the considerations that are before us when we are studying a prospective investment in a gas transmission company: I already have made it clear that our interest in this industry exists solely because of the availability of natural gas. Therefore, one of the first things that we consider is the quantity and deliverability of reserves available to the transmission company.

This reserve study should be prepared by a firm of consulting geologists and engineers who are entirely independent of the pipeline company and whose assignment basically is to examine all of the available data in respect of the reservoirs contracted to the company in order that they may make a report backed by their skill, knowledge, integrity, and reputation that there is an adequate quantity of gas to supply the line at least for the period of years during which the senior security being considered is to be outstanding and that the deliverability is such that

annual demand requirements can be met during that period.

Having obtained professional assurance that a supply of gas will be available to the line in future years, it then becomes necessary to be certain that the reserve position does not deteriorate in the future by virtue of some unforeseen contingency or development that was not present when the initial appraisal was made. This is accomplished by imposing upon the company in the indenture a requirement that a similar reserve study be made by a firm of independent geologists at various future dates, usually every two or three years, with the proviso that if such a study indicates that the reserves then dedicated to the line are insufficient to extinguish the indebtedness during its normal life, accelerated amortization will be provided to accomplish the full pay-back before exhaustion of reserves.

Having determined the availability of gas and the prices to be paid for it, we then look at the other end of the pipeline and examine the contractual arrangements which the pipeline company has for the sale of its throughput. If these contracts are for long periods of time with other pipeline companies, distribution companies, or industrial companies with a top credit rating, and contain a requirement

that the purchaser must take or pay for a very substantial percentage of deliverability of the line, the basic ingredients for a satisfactory investment are present. In fact, using this information augmented by very carefully projected estimates of operating income and expense which have been prepared by the company with the assistance of independent engineers, predicated upon the granting of rates by the Federal Power Commission sufficient to provide at least a 6 per cent return on the rate base, life insurance companies have provided as much as 75 per cent of the cost of constructing new pipelines.

Under requirements of the law, a life insurance company domiciled in New York cannot invest in a new pipeline unless secured by a mortgage on all physical property. After the line has been in operation for five years and has met certain earnings standards, investments may be made in unsecured debt and in preferred stock, and after a 10-year record of earnings and dividend payments has been established, investments may be made in common stocks. In the case of each contemplated investment, a new reserve study of a type similar to that described must be analyzed as the key to the final decision.

In respect of distribution companies, a somewhat different set of investment

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"There is at present one unresolved question upon the wise solution of which the future of the entire industry may depend. This is, of course, whether the producers of gas are to be subject to regulation by the Federal Power Commission as to the prices they receive for the gas they produce. It is my opinion that such regulation would be extremely difficult and expensive to achieve and disadvantageous in end result and that our present system should continue."

THE GAS INDUSTRY'S PROBLEMS FROM THE INVESTOR VIEWPOINT

considerations is involved. The vast majority of these companies started as manufactured gas units and are now engaged in selling either straight natural gas or mixed gas. Some of the former companies are still maintaining the manufactured gas plants for stand-by and for peak-shaving purposes, and most of the latter have long since passed the point in demand where they could meet their requirements if anything happened to their supply of natural gas. Therefore, again the question of gas supply is most important and an examination of the company's purchase contracts with the pipeline and the pipeline company's reserve position is a basic consideration.

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I BELIEVE that life insurance companies have invested funds in all of the various securities which the well-established distribution companies have issued where gas purchase contracts and the over-all financial picture are satisfactory. Considerable difference of opinion exists concerning the extent to which the senior securities of distribution companies should be completely amortized during the life of initial gas purchase contracts, and considerable financing has been done by some companies which would provide for leaving a substantial portion of the issue unamortized, which would appear to suggest that either

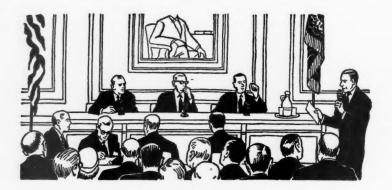
additional gas reserves can be contracted for at an economic price or that some other source of supply could be obtained, possibly a return to manufacturing. I think that with each passing year, with the substantial increase in the use of gas, further doubt is cast upon the wisdom of this assumption. In fact, I think a real question exists for the industry, the Federal Power Commission, and other regulatory bodies as to whether substantial increases in the number of gas customers are to be permitted unless further substantial reserves are established.

Since World War II, residential gas customers have increased by 28.5 per cent, while sales have increased 115.9 per cent. (See table below.)

During this same period, substantial quantities of gas have been discovered, but because of the steady increase in demand, the number of years' supply, based on the relation of annual withdrawals to year and reserves as published by the reserve committee of the American Petroleum Institute and the American Gas Association, has declined each year with the exception of 1949 when there was only a very slight increase. These figures show that in 1946 reserves were 32.5 times annual production as compared with 23 for 1953. On the basis of most recent esti-

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	Residential Customers (000's)	Total Customers (000's)	Sales (Therms) (Millions)
1946	19,157	20,637	26,379
1947	19,835	21,417	29,882
1948	20,562	22,246	33,885
1949	21,264	23,036	35,790
1950	22,146	24,001	42,090
1951	23,042	24,953	48,222
1952	23,852	25,850	52,704
1953	24,619	26,703	56,948
Per cent increase	28.5	29.4	115.9
	655		



The Responsibility of Regulators

Am basically sympathetic to the problems of the Federal Power Commission and other regulatory bodies. Theirs is a responsibility that requires great wisdom, patience, and foresight. This last requires that they be eternally alert to the implications of the trend of the relationship between the supply of and use of natural gas, and be prepared to grant reasonable and equitable rate increases where necessary to enable transmission and distribution companies to pay a price for gas which will encourage the taking of risks incident to its finding."

mates, withdrawals in 1953 were 9.2 trillion, a figure which exceeded net additions to reserves each year from 1947-52, inclusive. It is significant that in the postwar years net additions to reserves exceeded 1953 withdrawals in only two years—1946 and 1953. (See table, page 658.)

I have no doubt that the demand for gas will increase substantially in the future largely through the addition of residential customers, even though the price of gas continues to rise. I also have no doubt that the reserves of natural gas will increase substantially. In fact, there is considerable evidence to support the belief that merely deeper horizons in known present fields will add perhaps as much as 25 per cent

to the reserve picture, and there is considerable evidence that substantial reserves will be added from offshore locations. Even the acceptance of these factors, however, does not eliminate the problem that may one day exist for the gas consumer if this trend is allowed to continue.

REGULATORY commissions have already recognized this problem by prohibiting additional house-heating customers by distribution companies in certain localities until additional pipeline gas could be contracted. Obviously, the pipeline company wishes to do more business, as who doesn't in this wonderful and dynamic economy of ours, so it endeavors to purchase more

gas from producers and to obtain Federal Power Commission approval for expansion of its capacity to deliver the gas to the consumer.

Now the largest portion of our gas reserves in this country has been found by searchers for oil. Undoubtedly a large amount will be found in this way in the future, but whether or not it is found in this manner, it is certain that it will be found at greater expense. This means that if an adequate and dependable supply of gas is to be available in the future, it will cost more to the pipeline company, more to the distribution company, and more to the consumer despite the efforts of pipeline companies to develop underground storage. The principal public relations job which the gas industry has is to beam information to the consumer that will enable him to understand this problem and be willing to accept a higher price for gas.

I am basically sympathetic to the problems of the Federal Power Commission and other regulatory bodies. Theirs is a responsibility that requires great wisdom, patience, and foresight. This last requires that they be eternally alert to the implications of the trend of the relationship between the supply of and use of natural gas, and be prepared to grant reasonable and equitable rate increases where necessary to enable transmission and distribution companies to pay a price for gas which will encourage the taking of risks incident to its finding.

THE primary responsibility for telling this story to the consumer has rested with the distributor since the direct contact is his. However, the three segments of the industry—production, pipeline, and distribution—by the very nature of the

business are interdependent. What happens to one affects the others. Therefore, it is necessary for the distributor in explaining the problems of the industry to the consumer to tell the whole story as production, pipelines, and distribution are affected, but this means a bigger and costlier information job than the distributor previously faced. Therefore, it is my opinion that there should be a two-way street of operation in carrying out this job for in this operation the producer and the pipeliner have a stake in assisting the distributor in telling the gas industry story. I also can see where the trade associations and the Federal Power Commission could join in this necessary co-ordinated industry information effort.

It seems to me that the fundamental present-day concepts of the gas business must be understood by the consumer. No longer is the major portion of his supply represented by flare gas. Instead, he is being supplied by gas withdrawn from large reservoirs with substantial annual depletion, the replacement of which requires deep drilling in known areas or geological and geophysical work which must precede exploratory drilling in other areas. The very nature of the oil and gas business in our competitive economy suggests that the more attractive locations are subjected to the drill stem first and the less likely are put aside for more intensive work at a later stage of development. This means more work, and more work means greater cost, and the resultant product must bear a price that will provide the incentive.

THE consumer must understand these facts and then must decide if he wants to have a continuous dependable supply of gas for a long future period in an amount

sufficient to enable him and his neighbors and friends to increase their use of this wonderful commodity.

It should also be made clear to the consumer that gas is still very cheap and that increases can be made in the price of gas at the wellhead without raising the price of gas to him by an amount that would make it more expensive than competing fuels.

NATURAL gas in Louisiana has recently been contracted at 20 cents per MCF for sale to a pipeline that will be constructed if Federal Power Commission approval is obtained. The gas would be delivered to a distribution company about 1,200 miles away at 39.5 cents. Gas for house-heating purposes is sold by that company for about 73 cents, at which price it compares with fuel oil at about 8.7 cents per gallon and coal at \$14 per ton. Actually, fuel oil costs 13 cents per gallon and coal \$21 per ton in that area. I assume that increases in the price of gas must be made to the consumers in that locality if the distribution company is to earn a fair return on its rate base, and it must do so if it is to be able to attract capital in competition with other businesses to finance the plant additions necessary to meet expanding needs. It is only if the consumers in a given territory

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conclude that they do not need or want more gas and will be content with a dwindling supply and have the concurrence of the appropriate state regulatory body and the Federal Power Commission that they can ignore the trends to which I have referred.

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HERE is at present one unresolved question upon the wise solution of which the future of the entire industry may depend. This is, of course, whether the producers of gas are to be subject to regulation by the Federal Power Commission as to the prices they receive for the gas they produce. It is my opinion that such regulation would be extremely difficult and expensive to achieve and disadvantageous in end result and that our present system should continue. State regulatory bodies, particularly the Texas Railroad Commission, have on the whole done a statesmanlike job with respect to regulating both gas and oil production. It is evident that the prime need for the entire gas industry is for not only continued but increased exploration and developmental activity. Anything that puts a restraint on such activity will not only adversely affect the entire gas industry but will, within a short period, affect the available supply of gas to consumers and will, in my opin-

TRILLIONS OF CUBIC FEET

	Reserves Beginning Of Year	Addi- tions	With- drawals	Net Additions To Reserves	Reserves At End Of Year	Years' Supply Based on Withdrawal
1946	147.8	17.7	4.9	12.8	160.6	32.5
1947	160.6	10.9	5.6	5.3	165.9	29.5
1948	165.9	14.0	6.0	8.0	173.9	28.9
1949	173.9	12.8	6.2	6.6	180.4	29.1
1950	180.4	12.1	6.9	5.2	185.6	26.9
1951	185.6	16.2	8.0	8.2	193.8	24.2
1952	193.8	14.5	8.6	5.9	199.7	23.2
1953	199.7	20.9	9.2	11.7	211.4	23.0
AY 27, 1954			658			

THE GAS INDUSTRY'S PROBLEMS FROM THE INVESTOR VIEWPOINT

ion, eventually substantially increase the amount which consumers must pay.

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I am confident that everyone familiar with the gas industry agrees that the volume of natural gas withdrawn and sold will continue to increase and that additional supplies of gas will and must be found.

It follows axiomatically that all phases of the industry will continue to require large sums of capital. The industry enjoys a satisfactory credit rating and investors have been and are now willing to place their funds in its approved projects. They will not do so in the future with the same degree of readiness or will do so only with considerably greater expense to the industry if the volume of gas reserves continues to decline in relation to withdrawals. Moreover, additional expansion will be difficult to achieve if consumers and the various regulatory authorities who act for them are reluctant to recognize the need for a return on the money invested in this dynamic and growing business which will enable it to attract capital in competition with many other promising and growing businesses in our very wonderful capitalistic economy.



Gas Industry Urges Private Enterprise Support

AWARE of the growing concern over a period of years with respect to the future of the private enterprise system in this country, the American Gas Association has adopted a resolution urging that the government should refrain from competing with private enterprise and should leave the development of the public utility business and other businesses to the enterprise of individual investors.

Even though indications point toward a more constructive regulatory climate, the board of directors of the American Gas Association believes continued strenuous efforts are necessary to preserve and

strengthen the private enterprise system.

For this reason, the board has declared its firm belief in and adherence to these three major principles which have guided the \$14 billion gas utility industry since its inception: (1) It is the obligation of the gas utility industry to supply gas to its customers at the lowest rates consistent with maintenance of adequate service and with fair treatment of investors and employees. (2) It is the duty of the government to provide fair and consistent regulatory procedure which will assure adequate public utility service at just and reasonable rates. Such procedure will also permit orderly development of the utility industry on a sound financial basis. (3) True to the American tradition, the government should refrain from competing with private enterprise, and the development of public utility business and other businesses should be left to those men of vision who risk their capital in the hope of reward through private enterprise.

Each member company of the association has been requested to take whatever steps are necessary to encourage adherence to these

fundamental American principles.



Will "Cybernetics" Do Away With People?

Electronic brains, push-button factories, cybernetics—telephone engineers have been living with them many years, and have always needed more and more people.

By JAMES H. COLLINS*

Suddenly, the wonders - of - science writers have got hold of "automation," and are picturing the marvelous new world it is going to bring about. And scaring the daylight out of the fellow with a job.

Production controlled by instruments, problems solved by electronic brains, no more drudgery, no more boring tasks—and he is promised a 6-hour day, a 3-day week, two cars in the garage, a chicken in every pot.

His big problem is going to be what to do with his new leisure.

But the fellow with a job is turning the picture over, looking at the back.

"Huh? Machines doing everything?" he ponders. "Things made so cheap I can afford to buy twice as much of everything? No people needed, nothing but gadgets? What becomes of my job, and me? How do I buy these things without a pay check? Something here needs to be explained."

Imaginatively, he sees himself standing in line for unemployment compensation, explaining to skeptical officials where he has been looking for another job.

The questions being raised by automation call for answers from management in many lines of business that are to be affected.

It happens that in the utility field there is one business where automation has been

^{*}Professional writer, resident in Hollywood, California. For additional personal note, see "Pages with the Editors."

WILL "CYBERNETICS" DO AWAY WITH PEOPLE?

going on for more than a generation. It has been comfortably lived with. Seldom has anyone ever had to worry about being "improved" out of a telephone job.

Telephone experience may be useful to management in other industries, supplying answers for job insurance.

THE wonder-mongers seem to be mixing up different aspects of automation.

Most spectacular are the electronic brains, the new science of cybernetics, that fill rooms with arrangements of tubes, and take a problem punched in a card, and, after hours, come up with an answer that would occupy a hundred Einsteins a dozen years, if computed by ordinary mathematical methods. These machines will predict election results, or forecast the weather, or solve complicated problems of jet propulsion, or guided missiles, or the intricacies of corporation affairs.

Then, there are the push-button factories that are going to take in raw materials at one door and spew out commodities at another: consumer goods ready wrapped, complete engine blocks, household appliances, whatever is wanted. All done automatically; everything controlled by instruments.

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The fellow with a factory job pictures his work without him. He may read about the "one-man" factory in California, which takes waste mineral from a roasting plant and processes it into a marketable chemical, with only one employee to keep an eye on the gadgets.

Another aspect of automation is the trend toward turning batch production into continuous processes. Typical at the moment is a loaf of bread. From time's

beginning, bread has been baked in batches. Now the flour comes in motor trucks, is fed out from silos, passes through the latest mechanized bakery, and comes out sliced and wrapped. The baking business is in a whirl, because mechanization is not only displacing bakers, but is scrapping machinery that yesterday was the last word.

THERE is paper work—automation coming to the office. Figures are marshaled to demonstrate that paper work is really doing us in, unbeknownst. Too many carbon copies, too much paper being filed and stored, too many office workers performing needless operations, running up the cost of goods.

But tomorrow, business machines will take over. No more coffee breaks! No more gathering round the water cooler for scuttlebutt. There will be nobody to gather. Robots everywhere, and the Old Man all alone, watching pointers on dials.

Everyday we read of tiny whisks that perform miracles of work always done by human brains and judgment. Tireless, too stupid to make mistakes. And the elderly fellow with an inspection or warehouse job reads about television systems that watch remote operations.

See! No hands!

Wonders of science will never cease.

The fellow with a job is worried. Especially if he is getting on toward forty. He puts an entirely different meaning on "hands." His own hands, his skill, his experience.

There is the craving for job security. Guaranteed wages and a minimum working year are being argued. Automation is cropping up in collective bargaining.

Questions for management to answer

are being raised, because automation is being made a bogy, a new industrial revolution that will substitute machines for brains, as the first revolution substituted machines for muscles.

Wonderful new age!

"How about me?" asks the fellow with a job.

In telephony, there appear to be at least three answers that have value for management in other industries, where automation is developing.

First, telephone mechanization has always been planned so far ahead that employees could be taken care of, and have been. There have been wonders as revolutionary as any, but never coming unexpectedly.

Second, telephone management has been keen about job training. Even before the war, during which the military worked out new, fast-training techniques, the telephone business had had to train people in new jobs, brought by improvements, and also for individual advancement.

Third, telephony has long had a strong "sense of company." Perhaps it was caught from railroading, when the latter was America's only Big Business. The trains must go through! And telephone people stuck to switchboards in emergen-

cies, made quick repairs, reported in for duty during their off hours. This company sense has been publicized in many ways, but always in terms of service to the public. It gives employees the feeling that they work for a fine organization, that the company will always be hep to what cooks, that it is thinking about its people.

There is a telephone saying, "With us, people come first." Pacific Telephone headquarters in Los Angeles has a sign reading, "For a good job with a good company, apply inside." It is a permanent gold-lettered sign.

"No matter what the engineers develop," telephone employees say, "I should worry about my job—this company will look out for me."

TELEPHONE plant has been likened to a factory, that manufactures contacts between people who want to talk to each other. Speeding up the connections cuts costs and time, improves the service, lowers rates, results in more sales, as with factory goods.

Also, telephone plant has been likened to the self-service of the supermarket—the more customers can wait on themselves, the more time and money saved.

Long, long ago, telephone engineers got busy on the push-button principle for

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"Telephone engineers are calm about automation. To them, it is just part of the mechanization that dates back to Watt's steam engine governor, Jacquard's perforated cards for weaving patterns. They see limitations overlooked by the wondermongers. Recently, the engineers of a large control instrument company . . . did some imaginative figuring on an electronic brain that would be as good as a human brain."

their factory, with electric brains, cybernetic steersmen, self-service—in the word we have for it now, automation.

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In 1884, Bell engineers contrived a "village" system for doing away with "Central" in communities where all traffic passed through a single exchange. All subscribers' lines were run through each subscriber's office or home, making connections there.

In 1892, the independent (non-Bell) telephone manufacturing industry made an important contribution. A "step-bystep" system was installed in La Porte, Indiana, by the Automatic Electric Company, with five pairs instead of one, running to the central exchange, with push-button operation.

In 1896 a "finger-wheel" system was installed in Milwaukee, the dial system in the cradle, and over the years the present dial system was evolved, until introduced in single exchanges in cities like Omaha (1921) and New York (1922).

The goal today is national dialing. Over the nation there is still about 25 per cent of manual switching.

Telephony had an "electrical brain" in 1912, before electronic tubes appeared. When the subscriber sought a number, it started looking for a channel. Dial mechanism today seeks the fastest channel, goes around if it runs into a busy signal, finds another path, all in seconds.

TELEPHONE "lab" researchers are far ahead of the engineers—space cadets, in fact. Just now, they have an experimental gadget that will listen to a spoken number, translate it into colored lights, and make a mechanical connection. It may be taught to say a few words, but not in the immediate future. Still farther away, it

might write spoken words on a typewriter. This is the "automatic digit recognizer." Using initials, it has been christened "Audry."

In other industries, automation seems to be coming suddenly, from the outside, as a threat, in the shape of startling new equipment that management must install to beat competitors. The fellow with a job sees a vision, himself ringing out of the familiar factory tonight, and finding robots everywhere, doing everything, tomorrow morning.

The research men and engineers at work on various phases of automation do not anticipate any such "Presto, change!" They doubt whether push-button methods can be applied to all industries. They believe that there will be time to plan ahead, and take care of people.

A REPRESENTATIVE job of telephone mechanization has been going on among California companies since 1940, with acceleration at war's end in 1946, when equipment and materials again became available to tackle a huge backlog of waiting orders. Growth of plant had been meager during the war, and California population and industry had ballooned. Figures for the entire industry show what happened.¹

The state as a whole was about 69 per cent dial in 1940, which was brought up to 89 per cent by 1951. Northern California was less than half manual, 46 per cent, and was brought up to 83 per cent dial.

¹ Data prepared in 1951 for the California Public Utilities Commission, by a committee of executives from Pacific Telephone & Telegraph Company (Bell); Associated Telephone Company, Ltd.; California-Pacific Utilities Company; California Independent Telephone Association; California Water & Telephone Company. Representing about 60 companies.

Sales Volume and the Machine

Part of automation, it is promised, is going to be bigger and better markets. With your costs and prices coming down, more people will be able to buy and enjoy more things, provided management realizes that marketing is now the key factor and does the selling job. Sales-minded fellows are insistent on this point: Goods piling up, consumers must be taught to consume more. The standard of living must increase each year until, by 1975, say, people alive today will not recognize America in its plushiness."



Southern California was more highly mechanized, about 88 per cent dial in 1940, and has been brought up to around 95 per cent—is approaching full mechanization.

Many old manual stations were converted to dial, and of course all new exchanges built were modern. So there was a great elimination of switchboard jobs, both actual—where operators were no longer needed for that work—and theoretical—where new facailities created no such jobs.

But the total work force was more than doubled, from 27,000 employees in 1940 to 64,000 in 1951. About 62 per cent of employees are women, and the increase was from 16,000 to 40,000. In 1940, telephone service employed 13 per cent of all women in California factory jobs, reached 20 per cent during the postwar period, and is today around 17 per cent.

 $\mathbf{B}^{\scriptscriptstyle\mathrm{ELL}}$ engineers have calculated that Los Angeles city traffic today, on a

manual basis, would require a board extending from downtown to Beverly Hills, nine or ten miles. They haven't calculated where the girls could be found to operate such a board. There has been a persistent shortage all those years.

Engineers always reach for a slide rule. At the end of 1944, Bell was 200,000 phones behind orders. All new construction would be mechanized.

"What's going to happen to jobs?" was asked.

The engineers were confident that no jobs would be lost, but that more would be created, as always had been. They figured an increase of 25 per cent in employees, felt that maybe they were sticking out their necks, but so the curve projected.

It has turned out to be more nearly 100 per cent.

On the average, two to three years will elapse between management's first consideration of a new exchange, the engineering, commercial, traffic, and plant

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studies, the construction and installation of equipment, and the final cut over.

Typical project is Riverside, in southern California, which next October 17th will be cut over to dial operation. Two years have passed since the final studies were made to determine, by the nature of the traffic, the calling habits of subscribers, the rate of growth and requirements for the future, whether an existing exchange shall be modernized, or a new exchange built elsewhere. Schedules are set up, and included is training for employees in new techniques at the proper time, generally a year ahead.

O^N a manual basis, Riverside's old switchboards employed 240 women operators. With dial operation, about 150 will be needed.

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The normal number of quits in a year would be around ninety, so new hirings are suspended a year ahead, automatically adjusting the number of women employees.

Also, a 6-day week will be worked, instead of the usual 5-day week. If there are temporary shortages of operators, others can be brought in from near-by exchanges.

Meanwhile, regular operators are being trained for dial jobs like information, interception, assistance to subscribers, long-distance traffic, and so on, needed when the cut over is made.

Some circuits from near-by exchanges are being brought into Riverside, adding about thirty operators.

After cut over, the regular rate of new hirings is resumed.

"Think!" is a famous desk slogan.

On the telephone man's desk it would be "Tomorrow!" 46YES, but all this time there has been a runaway market for phone service," is pointed out. "How many employees would have lost their jobs by mechanization if there had been no big backlog of waiting customers?"

Very good point!

Part of automation, it is promised, is going to be bigger and better markets. With your costs and prices coming down, more people will be able to buy and enjoy more things, provided management realizes that marketing is now the key factor and does the selling job.

Sales-minded fellows are insistent on this point: Goods piling up, consumers must be taught to consume more. The standard of living must increase each year until, by 1975, say, people alive today will not recognize America in its plushiness. Everything must be on the up and up; the economy is on the wing.

Maybe this will sound a bit familiar to the old bird who remembers the New Economic Era of the 1920's. If so, let him keep it to himself.

Revivalistic technique has been applied to automation, to scare the daylight out of management fellows.

Once they took their economics raw. So much retail trade, steel production, unemployment, and so on, from which they drew their own conclusions. Then the prognosticators discovered that hell-fire treatment, "What are you going to do about carloadings, bank clearings?" was something the management boys would pay for. "Suppose your sales shrink—what then? Or suppose your sales increase—how much are you going to get, how much your competitors?"

At their lunch clubs, in their business journals, the management boys are told that automation is going to eliminate them, unless they wake up to the new tempo, the new orientation of business. Until now, production has been everything. With automation it will become just a matter of push buttons and instrument panels. Tomorrow, the president of the company, and the chairman of the board, and several vice presidents, will be men with selling backgrounds.

REALLY, the sales-minded fellows are booted and spurred and climbing in the saddle. They announce automation as doom to the management boys, unless they change their ways.

And the management boys apparently like automation cooked and served that way.

"The problems are formidable," they admit. "It is disturbing. But we want to face the facts. We must be realistic."

And they pick up the check.

Good selling has been part of the telephone business from the beginning. Its wonders of science have been publicized in terms of better service and lower rates to the public. Nobody has been menaced. Telephone mechanization has illustrated the principle that every American believes in—that it makes more jobs than it eliminates.

Telephony's customers have responded, increasing the volume of traffic. They have learned to talk more, and farther. During the war millions of men and women in service talked to their families across the country, and overseas, and discovered how clear the transmission was, and how reasonable the rates, which through the years have been coming down.

The supermarket angle of telephone

service has been discovered since the war, in the outdoor pay station. For years, pay phones had been located indoors. The customer who wanted to talk looked for a sign on a drugstore or barber shop. Now, with booths placed outdoors, at busy intersections, customers are reminded to call up Aunt Jane; talk becomes impulse merchandise.

TELEPHONE engineers are calm about automation. To them, it is just part of the mechanization that dates back to Watt's steam engine governor, Jacquard's perforated cards for weaving patterns. They see limitations overlooked by the wonder-mongers.

Recently, the engineers of a large control instrument company (Minneapolis-Honeywell) did some imaginative figuring on an electronic brain that would be as good as a human brain. It would take the Pentagon to house it, they reported, the waters of the Mississippi to cool it, and the power load of a large city to run it.

"Some day the most elaborate electronic brain may be as good as an ant's brain," they concluded.

"Suppose everything does go push button," reason the telephone engineers. "No people in production—people just become consumers.

"Suppose one little robot gets the bellyache. There will have to be bigger and better trouble shooters to get the system perking again. At least, we've had to train them in this business, for more interesting jobs.

"If everything comes to push buttons, we will need a lot of push buttons. And we will probably have to hire people to make them."

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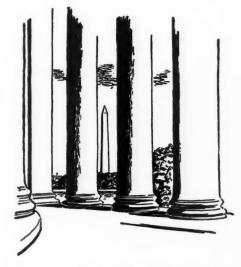
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Gas Bill Hearings Put Off

THE action of the Senate Interstate ■ Commerce Committee in postponing for at least a month hearings on the Ferguson Bill (S 3178) kills what little hope there might have been for this legislation to emerge from House or Senate pigeonholes. The Ferguson Bill, which has a companion in the House known as the Oakman Bill, would make it mandatory for the Federal Power Commission to go back to the original cost rate base treatment of company-owned production in fixing rates under the Natural Gas Act. Hearings had been scheduled to begin May 6th. But the postponement until June was made on request of the bill's author, Senator Ferguson (Republican, Michigan).

When this measure was first introduced, just before the FPC ditched the original cost rate base and adopted "fair field price" (for company-owned production) in deciding the Panhandle Eastern Pipe Line Case, there was some speculation about the authors' objective and about the pressure behind the bills. Now it would appear that at least one of the reasons for the introduction of this legislation so late in

the congressional session, was to make a little political hay for the authors in the forthcoming close election contests. In gasconsuming states such as Michigan, the reaction to the Panhandle Eastern Pipe Line decision has indicated that a political issue will be made over gas rate increases.

Another measure to come before the Purtell Subcommittee of the Senate Interstate Commerce Committee is the Hunt Bill (S 1287), which would restrict importation or exportation of natural gas from Canada or Mexico. Hearings on this bill were held May 13th and 14th.

An indication of wide interest in both of these measures is to be found in the considerable list of witnesses who have requested time to appear for or against both of these bills. Appearing on the Ferguson Bill are: Senator Ferguson, sponsor of the measure; Paul Kayser, president of El Paso Natural Gas Company; Michigan's attorney general; a representative of Wayne county, Michigan; John A. Ferguson, executive director of the Independent Natural Gas Association of America; and Glenn W. Clark, president of Cities Service Gas Company.

PUBLIC UTILITIES FORTNIGHTLY

An even greater number of persons have indicated a wish to present their views on the Hunt Bill: Senator Hunt (Democrat, Wyoming) and other Congressmen; representatives of the National Coal Association, Independent Natural Gas Association, United Mine Workers of America, and coal producer groups; Edward Falck, representing Southern California Gas Company and Southern Counties Gas Company of California; Paul H. Graves, president of Trans-Northwest Gas, Inc.; C. R. Hetherington, vice president of Westcoast Transmission Company, Ltd.; and C. H. Gueffroy, president, Portland Gas & Coke Company.

Preference Clause Still Strong

The dropping of the traditional preference clause in a new federal power proposal has been made by the Interior Department, which would allow federal loans for nonfederal reclamation projects. It would also drop acreage limitations contained in most reclamation legislation. The idea faces stiff opposition in the House Interior Affairs Committee. Chairman Miller (Republican, Nebraska) termed the proposal "completely unacceptable," although he has expressed a willingness to amend his own bill (HR 5301), which would permit such loans with "preference" guaranties and the 160-acreage limitation with respect to irrigation provisions.

The legislation is designed to aid local groups to finance their own multipurpose projects through bond issues, such as the tridam multipurpose projects on the Stanislaus river in California. This is the first attempt to get new public power legislation through Congress without the "preference clause." But the hang-over of sentiment in favor of the traditional "preference clause" in such laws is still too strong to expect a congressional majority to shift

to the point of enactment such a bill at this time or for the indefinite future.

THE preference clause came in for plenty of criticism by witnesses appearing before the Hoover Commission task force which opened hearings on the West coast early in May. This is the Task Force on Water Resources and Power, which heard public officials, businessmen, and municipal plant managers criticize the power and resources project policy of previous administrations.

Dr. Robert G. Sproul, president of the University of California, submitted a statement urging strict requirements which would oblige the federal government to sell power without discrimination as to private or public buyers. Dr. Sproul heads the California State Chamber of Commerce's natural resources committee. He confessed some confusion over policy of a government which favors one community with a low rate because it is served by a publicly owned plant.

The active rôle of the federal government in reclamation and power development was hit by two Los Angeles witnesses. H. A. Miller, a chamber official, and Samuel B. Morris, general manager of the city's Water and Power Department, recommended the application of sound business principles to federal project cost analysis. Morris contended that projects should be built only where their cost could be made self-liquidating. He urged dropping the "one basin account" for river systems, saying that the method was used to carry unsound projects which never could stand alone without subsidy.

W. M. Harrison, chairman of the Committee for California Ownership of the Central Valley Project, told the Hoover Commission unit that only through state purchase of the U. S. Bureau of Reclamation project could justice prevail.

Wire and Wireless Communication



Lee Discusses Industrial Communications

ELECTRIC utility companies are the heaviest users of industrial radio communications, according to Robert E. Lee, member of the Federal Communications Commission. In an address to the Industrial Communications Association Conference in Washington, D. C., early this month, Lee said the use of two-way mobile communication by the power industry has resulted in greater safety to the general public, continuity of service, and rapid restoration of service when it is disrupted. This has more than justified the establishment of such a service, Lee said, adding that the FCC's books now show nearly 7,400 authorizations to power utility companies.

"Petroleum and natural gas industries are running a close second to the power utility companies in the use of radio," Lee told the conference. "It is being employed in locating new oil fields both on and offshore, drilling new wells, operating producing fields, and in working almost every oil and gas pipeline system in the country." There are about 5,300 authorizations to oil and gas companies, Lee revealed.

THE fact that there are more than 255,-000 authorizations in all the safety

and special radio services, and that during the last fiscal year the FCC received more than 141,000 applications from this field, explains why the "housing shortage" in the radio spectrum has made it impossible for the commission to grant the request of every business or person who wants to use radio for private purposes. Naturally, the commission is trying to find ways to make a fuller and more economical use of the limited frequency space. The fundamental problem of frequency availability is present in all of the spectrum engineers now know how to use, Lee noted. ". . . we must not forget and must make use of communications facilities make use of communication facilities other than radio whenever possible."

"In any case where fixed point-to-point communication is required, main reliance must be placed on the common carrier facilities furnished by the telephone and telegraph companies if we are to make the most effective use of the limited available spectrum space," Lee told the conference. "The common carriers have accomplished unprecedented improvement and expansion in the postwar years," he said, noting that the Bell system has added more than 19,000,000 telephones since the end of World War II in contrast to the 22,000,000 telephones installed in the almost 70-year period ending 1945.

More than 4,000 American business firms are now using private wire telegraph systems leased from Western Union to handle their communications, Lee revealed. These leased wire networks employ 1,360,000 miles of telegraph circuits and link thousands of headquarters offices, branches, and plants throughout the nation for the direct, two-way exchange of volume communications. Lee also mentioned the development by Western Union of a new facsimile system, known as "Intrafax" which is now available to industry for the transmission of communications in picture form. This system already is being used by many large industries for sending charts, diagrams, data, and other graphic material.

How does the use of common carrier facilities help the overcrowded radio frequency situation? Lee explained:

Many thousands of common carrier circuits are in cables which take none of the frequency space. Thousands more are in broad band radio systems which make highly efficient use of the spectrum to the fullest public benefit. The networks of common carrier lines take alternate routes, frequently over radio as well as cable paths, and the circuits can be interconnected at many locations to provide alternate facilities in case of circuit failure. Common carriers have highly trained forces available day and night throughout the country to reroute, repair, and maintain these facilities. Nowhere else in the world does the public get such varied and widespread services at so little comparable cost.

Lee advised those industries planning private communication systems to study and be fully aware of the vast reservoir of common carrier facilities already available before arriving at decisions. "Bil-

lions of dollars in plants have been invested and dedicated to your service," Lee told the conference, "and great industrial laboratories are maintained for the purpose of meeting your needs. The use of these services means that your capital dollars are freed for further contributions to the national economy, which only your businesses are in a position to make." Service by common carriers, subject to reasonable regulation, Lee concluded, is the American way of avoiding the economic waste that unnecessary duplication of communication systems creates.

REA Adopts Short Cut in Loan Processing

THE Rural Electrification Administration has adopted a new preloan procedure to speed up the processing of loans for rural telephone service. The key to the change, according to REA Administrator Ancher Nelsen, is a recently revised standard contract for engineering services which REA recommends for use by applicants for loans. The new procedure combines into a single engineering study a number of different engineering steps which have proved time-consuming to telephone organizations applying for loans to provide modern telephone service in rural areas.

Under the new contract consulting engineers will complete the fundamental engineering studies before the REA loan is made. Such a procedure is expected to shorten materially the time required for REA process loans and to advance construction funds to borrowers. It was adopted after being discussed with and endorsed by a recent conference of consulting engineers in telephone plant construction from all parts of the country.

Financial News and Comment

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BY OWEN ELY

Outlook for Natural Gas Utilities Improved by New FPC Rate Policy

THE natural gas industry had a moderately favorable year in 1953, although unseasonably warm winter weather again retarded house-heating sales of gas for companies in certain areas. Percentage increases over 1952 for class A and B gas utilities were as follows (as reported by the FPC in its December bulletin):

	Month of December	Year 1953
Revenues	13.5%	19.2%
Cost of Purchased Gas	18.6	27.5
Salaries and Wages	10.1	10.3
Other Operating Expenses		8.9
Depreciation and Amortization		14.0
Taxes	D9.0	14.8
Net Gas Operating Revenues	22.2	13.2
Gross Income	18.5	13.5
Income Deductions	12.5	22.8
Net Income		9.6

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Earnings data are not available yet for early 1954. Total sales, in millions of therms, for the entire gas industry (including manufactured and mixed gas) for the first quarter this year compared as follows with last year:

	1954	1953	Per Cent Increase
January	6,556	6,055	8.3%
February	6,185 5,905	5,610 5,680	10.3 4.0
Total	18,646	17,345	7.5%

Recently, the industry has been greatly encouraged by the changed regulatory policy of the Federal Power Commission. First came the struggle of the Columbia Gas System to obtain rate increases for its subsidiaries (covering interstate business) to offset the higher cost of purchased gas. The first FPC decision proved disappointing, but following a protest about the erroneous methods of calculating rate of return used by the staff, the final decision gave the system substantial relief.

THE commission has also speeded up its decisions, largely by using the conference method and "canned" testimony. (See page 618, May 13th issue.) However, the continuing rise in field prices for natural gas has resulted in recent applications for rate increases totaling nearly

\$22,500,000 by six pipeline companies, all of which have had other increases made effective in the past few months. The largest proposed increase is by Tennessee Gas Transmission (\$13,600,000), resulting from "price redetermination" clauses in gas purchase contracts.

Possibly as a result of these recurring rate increase applications the FPC has now announced that it has under consideration the desirability of adopting rules concerning automatic escalation and favored nation clauses in gas purchase contracts by interstate natural gas companies with producing companies. Declaring that while it is generally desirable for the protection of consumers that the interstate pipeline companies' gas purchase contracts cover periods of maximum duration rather than only short limited periods, the commission said that nevertheless "contract provisions which are not in the public interest should not be approved or given formal recognition merely for the purpose of extending the reserve contract period."

The commission said that it is considering the desirability of adopting rules either in connection with the issuance of certificates whereby contracts with these features would be declared not to be acceptable as evidence of gas supply, or in connection with rate making whereby increased payments made under escalator provisions but having no relation to additional or improved service or gas supplies could be disallowed, "or in some other connection whereby effective action can be taken in the premises pursuant to the terms of the act."

In a recent noteworthy decision the Federal Power Commission definitely modified a former trend of "New Deal" regulatory policy, by adopting the so-called "fair field price" method for fixing reasonable rates for pipeline companies that

produce as well as transport and sell gas. This is not, of course, a complete departure from the original cost rate base used by the commission since 1938, since the latter will still apply to facilities for the transmission and distribution of natural gas. The decision will, however, permit the utility to value the gas which it produces on a comparable basis to the amount which it would have to pay if it bought the gas from outside producers in the same field. This will encourage natural gas utilities to acquire larger reserves of their own, and thus help to stabilize the industry.

The "fair field price" policy adopted by the commission is not identical with the current field price paid under new contracts, but has initially been defined as the weighted average price paid for identical gas in arm's-length sales in the same fields. If this average is weighted by prices established in previous contracts, it may be considerably lower than current prices. However, if gas prices under new contracts continue to advance, it is possible that increasing weight will be given to the current field price and over a period of time the "fair field price" will tend to approach the actual price paid under new contracts. (The recent statement of policy with respect to escalator clauses may operate to retard this trend, however.)

HIS important change in federal regulatory policy was contained in the Panhandle Eastern Pipe Line decision. This decision was considered constructive on balance for the industry as a whole, although it reduced the company's requested \$21,400,000 rate increase (filed in August, 1951, and later put into effect under bond) to only \$12,800,000. The company was allowed a rate of return of 53 per cent instead of the 61 per cent asked. But a partially offsetting factor was the substantial increase in operating costs

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permitted before arriving at the permissible net operating income— $5\frac{3}{4}$ per cent on net cost of plant devoted to transmission and distribution. Panhandle had been paying an average of about 8.4 cents per thousand cubic feet for gas purchased from independent producers in the same field, and the decision permitted the cost of gas produced by the company itself to be valued at the same price, which was about ten times as large as it would have been under the old formula.

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Thus, while transmission and distributing facilities are still valued at net original cost for rate purposes, production facilities are given a sort of "fair value" basis. Such a basis could not be compared with cost of reproduction since the latter figure would probably reflect the highest cost now being charged for gas, perhaps around 15 cents per MCF. The 8.4 cents represents an average of old and new sales contracts and hence may be considered an "in between" figure, somewhat compara-

ble to the fair value compromise between original cost and reproduction cost.

III Panhandle's reserves estimated at over 3.5 trillion cubic feet, Barron's (April 26th issue) points out that this would increase the value of the company's reserves to around \$300,000,000 or about 100 times the depreciated net investment cost carried on the company's books. For the industry as a whole it has been estimated that reserves would be valued at about \$1 billion higher than the original cost. Both these estimates seem very high. Other companies which may benefit by the decision (after rate increases are applied for and approved) are Colorado Interstate Gas, Northern Natural Gas, Arkansas Louisiana Gas, Peoples Gas Light & Coke, and Equitable Gas. While the first two companies named will probably benefit the most (after Panhandle), it is very difficult at this stage to attempt any valuation of future benefits because of the many factors involved.

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RECENT RATES OF RETURN NATURAL GAS DISTRIBUTION UTILITIES

Date of		Nominal Per Cent	On A	of Return — On Average Depreciated		
Decision Decision	Company Jurisdiction	Per Decision		Cost—%		
11/19/52 12/ 2/52	Michigan Consolidated GasMichigan Southern Calif. Gas CoCalifornia	5.85%	6.65% 5.85			
12/18/52 4/20/53	Consumers Power Company Michigan Washington Gas Light Co Wash., D. C.		6.94 6.25	(a)		
4/28/53 5/28/53	Southern Union Gas Co New Mexico Peoples Gas Light & Coke Illinois	5.80	6.55 7.57	(b) (b)		
7/14/53 7/31/53	Southern Counties Gas Co	5.95 6.00 (c		(b)		
8/ 4/53 8/11/53	Wisconsin Natural Gas Co Wisconsin Manufacturers Light & Heat Penn.	6.25 5.48	6.25 6.77	(b)		
8/25/53 9/ 3/53	Peoples Natural Gas Co Penn. Indiana Gas and Water Co Indiana	5.49	6.89 7.43	(b)		
11/ 3/53 11/23/53	United Fuel Gas Co	6.25 6.80 (c		(b)		
11/24/53 1/ 7/54	Consolidated Gas UtilitiesOklahoma Public Service of ColoColorado	6.00 6.33	6.00 6.57	(b)		
1/12/54 1/16/54	Coast Counties Gas & El California Northern Illinois Gas Co Illinois Average	6.20 (6 5.85 6.08%	6.20 6.59 6.62%	(b)		

⁽a) Based on investment. (b) Based on end of test period rate base. (c) Company claim allowed in full.

The new ruling may check the trend in recent years to a "spin off" policy by natural gas utilities. Thus such companies as Southern Production Company, Hugoton Production Company, Aztec Oil & Gas Company, and others represent the segregation of production facilities and wildcat acreage by large gas utilities.

Some of the most important natural gas reserves are owned by oil companies, and because of the previous restrictive FPC regulation there has been little tendency by gas utilities in the past decade either to purchase these reserves, or to develop new reserves for themselves by exploration. Barron's estimates that the proportion of gas supplied by pipeline companies from their own wells has declined in the past twelve years or so from 30 per cent to around 12 per cent. Now, however, there are indications that several pipeline systems will seek to increase their reserves by development programs (including exploration in the Gulf coast tidelands area jointly with the oil industry).

The future outlook for the gas industry may be further clarified by a Supreme Court decision within the near future. which will finally determine whether the FPC has jurisdiction over independent gas producers and gatherers-principally the oil companies, but also including a number of nonutility gas companies which do not distribute and sell gas at retail. If the FPC is given this regulatory job-which in the past it has not been very anxious to assume, but which might now be facilitated by the Panhandle decision-this would tend to correlate all phases of the gas industry more closely, and promote a more orderly development and usage of gas resources.

PANHANDLE received some supplementary benefits in the FPC decision. It is

allowed to keep the benefits of its accelerated tax amortization certificates rather than having to pass these benefits to customers, as the previous membership of the FPC appeared to favor. It also allows Panhandle to retain the tax benefits of the statutory $27\frac{1}{2}$ per cent depletion allowance on its production properties instead of passing these on to the customer.

The new valuation of gas produced by pipelines will necessitate rate increases at the consumer level. However, these increases will be limited. In the case of Panhandle Eastern the increase is estimated to amount to 1.3 cents per thousand cubic feet and the typical residential consumer in Detroit, at the end of the line, faces an increase of only about 25 cents per month or 1.6 per cent of his gas bill.

Share earnings of the companies named above will not necessarily be improved in future as a result of the new rule and anticipated rate increases. The additional cash income might be offset by charges for the cost of new drilling, wildcatting, losses on dry holes, and other development expenses. Should the company decide to improve its share earnings, however, this could be done directly by taking advantage of the fair field price, or indirectly by tax savings resulting from application of the $27\frac{1}{2}$ per cent depletion allowance (or 50 per cent of net income, whichever is lower) as allowed in Treasury returns.

Among the state commissions, regulation of the natural gas utilities also appears to be showing a somewhat improved trend, partially due to the use of fair value or year-end rate bases in some states.

The rates of return allowed in recent rate decisions are indicated in the table on page 673, which was compiled by Walter Herrman, vice president of Southern California Gas Company.

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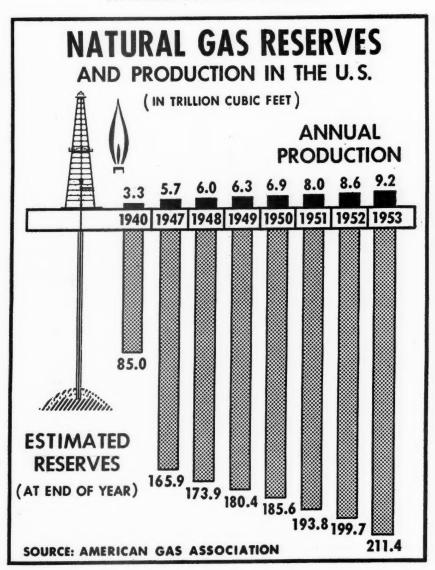
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NATURAL gas reserves in the United States continued to expand in 1953 despite a record withdrawal of 9.2 trillion cubic feet. At the end of the year 11.7 trillion cubic feet had been added to proved recoverable reserves, bringing the total to 211.4 trillion cubic feet. Increased exploration activities accounted for new discoveries last year of 7.1 trillion cubic feet compared with only 5.4 trillion of reserves in new fields brought in during 1952. Extended drilling in existing fields added another 13.4 trillion cubic feet to the nation's fuel reservoir.

PUBLIC UTILITIES FORTNIGHTLY

APRIL UTILITY FINANCING

PRINCIPAL PUBLIC OFFERINGS OF ELECTRIC AND GAS UTILITY SECURITIES

Date	Amount	Description	Price To Public	Under- writing Spread	Offer- ing Yield	Moody Rating	Indicated Success of Offering
		Mortgage Bonds and Debentures					
4/7	\$ 3.0	Community Pub. Serv. 1st 31s. 1984	101.93	.75C	3.15%	A	a
4/7	11.0	Georgia Power 1st 31s, 1984	101.47	.61C	3.05	A	d
4/13	15.0	National Fuel Gas S.F. Deb. 34s, 1979	102.60	.52C	3.10	A	a
4/14	18.0	Central P. & L. 1st 31s, 1984	100.49	.40C	3.10	A	d
4/14	8.0	So. Indiana G. & E. 1st 31s, 1984	102.46	.33C	3.00	Aa	a
4/15	20.0	Ohio Power 1st 3\frac{1}{8}s, 1984	102.46	.23C	3.00	Aa	a
4/21	12.0	West Penn Power 1st 3s, 1984	100.50	.40C	2.98	Aa	d
4/23	50.0	Columbia Gas System Sub. Conv.					
1, 20	00.0	Deb. 3½s, 1964	100.00	.49C	3.50	Ba	f
4/27	50.0	Commonwealth Edison 1st 3s, 1984	100.39	.57C	2.98	Aaa	c
4/29	15.0	Utah Power & Light 1st 34s, 1984	101.93	.44C	3.15	A	a
., = .	20.0		202.70				
4 110		Preferred Stocks	***	0.0537	4.10		
4/12	6.0	West Texas Utilities 4.40%	105	2.25N	4.19	_	b
4/14	20.0	Long Island Lighting 4.35%	100	1.90N	4.35	-	
4/15		Ohio Power 4.08%	102	1.17C	4.00	-	a b
4/21	7.0	Arkansas P. & L. 4.32%	101.65	1.44C	4.25	_	d
4/21	15.0	Northern States Power \$4.08	102	1.83C	4.00	_	
4/29	4.0	Empire District Electric 4.75%	100	1.90N	4.75	Earnings-	a
						Price	
		Common Stocks—Subscription Rights				Ratio	
4/5		Pennsylvania P. & L	39.75	f-N	6.04	7.9	g h
4/7	1.5	Public Service of New Mexico	11.25	.15N	6.04	6.7	h
4/7	1.3	Western Kentucky Gas	10	.80N	-	11.0	a
4/19	17.1	Northern States Power	14	.06C	5.71	7.9	f
		Common Stocks—Offered to Public					
4/14	12.5	Texas Utilities	50	.97C	4.02	6.7	a
4/19	35.4*	Gas Service	23.63	1.60C	5.25	7.1	a
4/20	.2	Florida Public Utilities	9	.65N	6.67	11.0	a
4/28	6.3	Northern Illinois Gas	15.75	.55N	5.08	5.9	a

*Not a new issue—sold by Cities Service Company. a—Reported well received. b—Reported fairly well received. c—Reported issue sold somewhat slowly. d—Reported issue sold slowly. e—Part of issue was offered in exchange for the old \$6 preferred, with cash adjustment; the issue was 47 per cent exchanged. It is reported that the unexchanged stock sold slowly. f—Results not yet available. g—Ninety-three per cent subscribed. h—Ninety-four per cent subscribed. C—Competitive bidding. N—Negotiated underwriting.

APRIL NEW MONEY FINANCING (In Millions)

	Offered to Stockholders	Sold to Public	Sold Privately	Total Financing
Electric Companies				
Bonds	-	\$ 88	\$20	\$108
Preferred Stock	-	32	10	42 59
Common Stock	\$46	13	_	59
Total	\$46	\$133	\$30	\$209
Gas Companies				
Bonds		\$ 65	\$25	\$ 90
Preferred Stock	_	-	_	_
Common Stock	_	7	-	7
m		4 70	401	A 07
Total		\$ 72	\$25	\$ 97
Total Electric and Gas	\$46	\$205	\$55	\$306
Total Electric and Gas	φ40	\$4U5	φοο	φουυ

Refunding operations included \$50,000,000 electric utility bonds and \$25,000,000 preferred stock. Thirty-five million dollars common stock of a gas utility company was sold by the holding company. Source of data—Irving Trust Company.

MAY 27, 1954

FINANCIAL NEWS AND COMMENT

ELECTRIC UTILITY STATISTICS AND RATIOS

		Latest	Latest	Per Cer Latest	nt Increase Latest
	Umit	Month	12 Mos.	Month	12 Mos.
Operating Statistics					
Output KWH—Total (February) Hydro-generated Steam-generated	Bill. KWH	35.2 8.6 26.6	445.0	5% D5 8	11%
Capacity (February)	Mill. KW	92.5 78.6	_	8	12
ruel Use (February) : Coal	Mill. Tons Mill. MCF Mill. Bbls.	9.1 75.7 5.7	=	D1 31 D16	=
Coal Stocks	Mill. Tons	43.8	_	11	-
Sustomers, Sales, Revenues, and Plant (Janua	ary)				
WH Sales—Residential	Bill. KWH	7.6	71	11%	11%
Commercial	44	4.7 12.0	53 152	D3	9
Industrial Total, Incl. Misc	44	31.0	357		8
ustomers-Residential	Mill.	32.2	-	2 3 2 2	8 4 2 2
Commercial	66	4.5 .5		2	2
Industrial	ě4	39.6	_	3	3
ncome Account—Summary (January)					
evenues—Residential	Mill. \$	201	2,025	9%	11%
Commercial	44	126 139	1,433 1,716	6	8
Industrial	44	509	5,689	6	9
Sales to Other Utilities	66	37	419	5	2
Misc. Income	46	34	220	31	D4
xpenditures—Fuel	44	89 98	1,007 1,148	4	10 6
Misc. Expenses	44	72	899	4	5
Depreciation	44	52	564	13	11
Taxes	"	75	1,310	D1	8 12
Interest	44	31	351	12 NC	NC
Net Income	46	115	1,061	14	10
Preferred Div. (Est.)	44	12	138	7	7
Bal. for Common Stk. (Est.) Common Dividends (Est.).	46	103 53	923 635	17 10	12 8
lectric Utility Plant (January)	44	25,540	_	11%	_
eserve for Depreciation and Amort	44	4,919		8	
et Electric Utility Plant	*	20,621		12	_
ife Insurance Investments (January 1st-Apri	il 24th)				
tility Bonds	45	_	270	-	32%
tility Stocks	44		59		78
er Cent of All Investments	44	_	10%		30
-Decrease. NC-Not comparable.					
	677			MA	Y 27, 1954

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PUBLIC UTILITIES FORTNIGHTLY

	RECENT FINA	NCIA	L DAT	A ON		TILITY		KS		
1953 Rev. (Mill.)		5/5/54 Price About	Divi- dend Rate	Approx. Yield	Cur-	% In- crease	12 Mos. Ended	Price- Earns. Ratio	Div. Pay- Out	Moody Bond Rating
\$ 12 O 38 S 48 S 133 O 137 O 63 O 59 O	Pipelines East Tenn. Nat. Gas Mississippi Riv. Fuel Southern Nat. Gas Tenn. Gas Trans. Texas East. Trans. Texas Gas Trans. Transcontinental Gas	43 31 24 21 18 23	\$2.40 1.40 1.40 1.00 1.00# 1.40	5.6% 4.5 5.8 4.8 5.6 6.1	\$.62 2.57 2.06 1.65 1.33 1.59 1.81	29% D28 5 20 42 46	Dec. Dec. Dec. Dec. Dec. Dec. Dec.	14.5 16.7 15.0 14.5 15.8 11.3 12.7	93% 68 85 75 63 77	Ba A A —
	Averages			5.3%				13.8		
118 S O 232 S 9 O A 191 S 111 S S 10 O 72 S S 14 O 66 S A 95 S S 8 0 121 O 209 S	American Natural Gas Colorado Interstate Gas Colorado Interstate Gas Columbia Gas System Comsol. Gas Util. Consol. Nat. Gas El Paso Nat. Gas Equitable Gas Kansas-Neb. Nat. Gas Lone Star Gas Montana-Dakota Utils Mountain Fuel Supply National Fuel Gas Northern Nat. Gas Pennsylvania Gas Pennsylvania Gas Peoples Gas Lt. & Coke Southern Union Gas United Gas Corp.	47 47 14 10 14 63 38 24 27 22 22 18 40 21 73 18 148 18 30	\$2.00 1.25 .90 (a) .75 2.50 1.40 1.20 1.40 1.00 1.00 1.00 1.20 2.50# .80 6.00 .90 1.25	4.3% 2.7 6.4 4.0 4.2 5.8 4.4 5.2 4.1 4.5 5.6 4.5 5.7 3.4 4.4 4.1 5.0 4.2	\$3.69 1.45 .76 .50 1.18 4.11 3.22 1.76 1.87 1.87 1.87 1.28 2.58 1.10** 4.93 .86 9.72 1.18 1.99	30% D4 NC 288 30 D2 39 14 2 22 110 — 10 D30 D1 D52 12 11 40	Mar. Dec. Feb. Jan. Dec. Mar. Dec. Sept. Dec. Sept. Dec. (c) Dec.	12.7 18.4 20.0 11.9 15.3 11.8 13.6 14.4 14.1 15.5 19.1 14.8 20.9 15.2 15.3 15.1	54% 86 118 64 61 50 80 64 77 95 73 78 70 109 51 93 62 76 63	Aaa ABaa Baa AA AA AA A
	Averages			4.7%				15.1		
20 A 32 S 28 O 10 O 44 O 114 O 115 O A 33 S 27 O 110 O 162 S 111 O A 3 A A O 7 O 22 S 33 S	Retail Distributors Alabama Gas Atlanta Gas Light Brooklyn Union Gas Central Elec. & Gas Central Indiana Gas Gas Service Hartford Gas Houston Nat. Gas Indiana Gas & Water Kings Co. Lighting Laclede Gas Minneapolis Gas Mississippi Valley Gas Mobile Gas Service New Haven Gas Light Northern Illinois Gas Pacific Lighting Portland Gas & Coke Providence Gas Rio Grande Valley Gas Seattle Gas South Jersey Gas United Gas Improvement Washington Gas Light Averages	21 22 32 13 12 24 35 22 26 14 11 24 20 18 27 17 35 22 9½ 2½ 20 35 33 34	\$.80 1.20 1.50 .80 .60 1.24 2.00 1.00 .80 .60 1.20 1.00 .90 2.00 .90 .48 .12 .80 2.00 .48	3.8% 5.5 6.2 5.0 5.7 4.5 5.7 5.5 5.0 5.0 5.7 4.7 4.7 4.7 4.1 4.8 3.6 5.1 5.3	\$1.67 1.47 2.58** 1.07 49 1.67 2.42 2.02 1.94 1.27 .91 1.33 1.42 1.87 .93 2.00 1.87 41 22 1.30 1.41 2.24** 1.68	4% D20 72 14 D44 NC 17 53 9 46 D4 17 14 D2 31 NC D6 10 21 30 11 23 2	Mar. Dec. Mar. Nov. Dec. July Dec. Mar. Feb. Dec. Dec. Dec. Dec. Dec. Dec. Adar. Dec. Dec. Dec. Dec. Dec. Dec. Dec. Dec	12.6 15.0 12.4 12.1 14.4 14.5 10.9 13.4 11.0 12.1 18.0 13.1 12.7 14.4 18.3 17.5 11.8 11.4 16.9 14.2 15.6 20.2	48% 82 58 75 122 74 83 50 63 66 65 63 86 86 100 48 117 155 62 71 80	Baa A A A Baa Baa Baa Baa Baa Baa A
	Canadian					4.404		15.3	71%	
18 S	International Utilities	30	\$1.40	4.7%	\$1.96	14%	Dec.		100	

FINANCIAL NEWS AND COMMENT

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER UTILITIES

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			V	VATER	UTILI						
1953	3		5/5/5	4 Divi-		Cur-	are Earn		Price-	Div.	Moody
Rev. (Mill.)		Price About	dend Rate	Approx.	. rent Period	% In-	12 Mos. Ended	Earns. Ratio	Pay- Out	Bond Rating
		nmunications Companies Bell System									
\$4,417 202 34 144 237 579 74		Amer. Tel. & Tel. (Cons.) Bell Tel. of Canada Cin. & Sub. Bell Tel Mountain States T. & T. New England T. & T. Pacific Tel. & Tel	44 75 113	\$9.00 2.00 4.50 6.60 8.00 7.00 1.80	5.4% 4.5 6.0 5.8 6.6 5.7 5.0	\$11.66** 2.31 5.45 7.28 7.50** 7.23 1.87	2% 19 18 5 3 6 7	Feb. Dec. Dec. Mar. Dec. Dec. Dec. Dec.	14.4 19.0 13.8 15.5 16.3 16.9 19.3	77% 87 83 91 107 97 96	Aa Baa Aa Aa Aa
		Averages			5.6%				16.4		
10 11 2 128 5 14 16 2 7 32 15 195	000808000008	Independents Calif. Water & Tel. Central Telephone Florida Telephone General Telephone Inter-Mountain Tel. Peninsular Tel. Rochester Tel. Southeastern Tel. Southwestern Sts. Tel. Telephone Bond & Share United Utilities Western Union Tel.	18 16 13 34 13 36 14 13 18 16 18 36	\$1.00 .90 .80 1.60 .80 1.80 .80 1.00 1.00 1.12 3.00	5.6% 5.6 6.2 4.7 6.2 5.0 5.7 6.1 5.6 6.3 6.2 8.3	\$1.62 1.84** .85 2.41 .93 2.32 1.23 1.09 1.54 2.07 1.44 6.77	76% 23 D14 45 43 30 D2 21 12 64 243	Jan. Dec. Dec. Dec. Dec. Dec. Dec. Dec. Dec	11.1 8.7 15.3 14.1 14.0 15.5 11.4 11.9 11.7 7.7 12.5 5.3	62% 49 94 66 86 78 65 73 65 48 78	Ba Aa Aa Ba
		Averages			6.0%				11.6		
2	Tran	sit Companies									
29 14 9 229 25 31 71 7 27 17 24	A0050500050	Capital Transit Cincinnati Transit Dallas Ry. & Terminal Greyhound Corp. Los Angeles Transit National City Lines Philadelphia Transit Rochester Transit St. Louis P.S.A. Twin City R. T. United Transit Averages	12 4 10 14 10 16 5 3½ 13 15 3	\$1.60 .75 1.40 1.00 1.00 1.40 .10 1.40 1.60	13.3% 18.8 14.0 7.1 10.0 8.7 2.9 10.0 10.0	\$1.16 1.12 2.32 1.33 1.15 1.86 Deficit .26 .91 .56	4% D6 6 46 D3 D77 189 33	Aug. (c) (c) June (c) (c) (c) (c) (c) (c) (c) (c)	10.3 3.6 4.3 10.5 8.7 8.6 — 13.5 15.4 — 6.3	138% 67 60 75 87 75 — 38 154 —	Baa Ba Ba
п	Vat	er Companies									
32 4	S	Holding Companies American Water Works. New York Water Service Operating Companies	10 68	\$.50 .80	5.0% 1.2	\$1.14 1.41	43% NC	Dec. Dec.	8.8 48.2	44% 57	_
11 7 4 3 6 9 3	008000000	Bridgeport Hydraulic Calif. Water Service Hackensack Water Jamaica Water Supply New Haven Water Phila. & Sub. Water Scranton-Springbrook Southern Calif. Water West Va. Water Service	30 37 40 33 58 44 16 12 39	1.60 2.20 2.00 1.80 3.00 1.00 .90 .65 1.40	5.3 5.9 5.0 5.5 5.2 2.3 5.6 5.4 3.6	1.57 2.73 3.53 2.83 2.50 5.50 1.17 .92 1.55**		Dec. Mar. Dec. Dec. Dec. Dec. Sept. Mar. Mar.	19.1 13.6 11.3 11.7 23.2 8.0 13.7 13.0	102 81 57 64 120 18 77 71 90	A A A A A
		Averages			5.0%				15.0		

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Decrease. *Earnings are calculated on present number of shares outstanding, except as otherwise indicated. **On average shares outstanding. #—Includes stock dividend. (a)—Paid 4 per cent stock dividend. NC—Not comparable. (c)—Year, 1952.



What Others Think

Is Manufactured Gas Coming Back?

HE upper limit to which the price at the wellhead of natural gas in the southwestern gas fields can go, without having competition from substitute gases cause a cutback on sales and hence on gas production, has virtually been reached on one part of the United States with the city gate rates for service now in effect in New England." This is the conclusion reached by William B. Tippy, executive vice president of Commonwealth Services, Inc., after wide discussion of natural gas prices with gas industry executives. A demand charge of \$4.75 per MCF of contract demand per month, a commodity charge of 311 cents per MCF, and a maximum allowed annual load factor of 74 per cent means that 52½ cents per MCF is the lowest attainable average price for gas at the city gate from one of the two lines serving New England, Tippy stated. During the development period, he explained, the other line has charged a ceiling price of 53 cents per MCF, but Tippy predicts city gate prices will rise above this figure when the development period is over. Sixty cents per MCF is a more probable average price as distribution company annual load factors approach 50 per cent, he stated, and where domestic space heating has an annual load of around 27½ per cent, the incremental cost of gas

to serve added space-heating business alone would be around 88 cents per MCF.

What is the competition that has created this situation in New England? Several gas distribution systems in New England, Tippy noted, already have high-btu oil gas manufacturing equipment which they state is capable of producing a satisfactory substitute gas for a direct operating cost of 55 cents to 60 cents per MCF of natural gas equivalent. Tippy explains:

Even though the costs of manufacturing oil gas will run somewhat higher when these companies use natural gas for base load and only manufacture during the peak periods, the peak shaving they do will undoubtedly cut deep into what would otherwise be pipeline contract demands and they will still manufacture substantial annual volumes of high-bru oil gas to supplement the natural gas they receive. About one substantial rate increase and the more efficient former manufactured gas companies in New England will be placed in the position where, to the extent that their facilities are adequate in capacity, they will be money ahead to manufacture their added gas requirements as their loads grow and hold their natural gas takes to minimum contract demands

used at the highest permissible annual load factor.

HIS situation is by no means limited 1 to New England, Tippy points out. In Florida there is no natural gas service at present except in the end of the Panhandle around Pensacola. Annual volumes required for space heating are very low because of the climate, and the nonspaceheating portion of the residential and commercial load is subject to a seasonal variation. For one company serving the Miami Beach-North Miami-Fort Lauderdale area, the total send-out to 45,000 customers was expected to be about 90,000 therms if a heavy peak day occurred this winter, such as is experienced every few years. With such a peak send-out, the company's annual load factor would be about 30 per cent. If the effects of peak day send-outs due to weather were excluded, Tippy explained, the winter peak would only be about 40,000 therms and the annual load factor of the nonheating gas would be about 65 per cent.

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s e e The company manufactures high-btu oil gas efficiently at a present cost of production, excluding fixed charges, in the neighborhood of 90 cents per MCF of 1,000 btu natural gas equivalent. This is somewhat higher than comparable New England costs, principally because of the distance by-product residual light oils and tars must be shipped to reach bulk markets.

Natural gas service to this Florida company would mean very little. Tippy stated as follows:

. . . If natural gas were made available at the same rates as in New England—and the distance from southern Florida to existing major pipeline facilities in Georgia would make pipeline gas from the Southwest at least that expensive in the opinion of many engineers—

natural gas would cost the company 83½ cents per MCF, or but little below the production cost of the company's own manufactured gas supply. Even if the company peak shaved all its space-heating requirements, the resulting cost of natural gas for the balance of its requirements would be 55½ cents per MCF. From this it would appear highly improbable that pipeline gas from the Southwest can be piped into southern Florida at a price sufficiently attractive to persuade an efficient manufactured gas operation to change over.

Tippy acknowledged, however, that drilling programs of the major oil companies now in progress in Florida may result in the discovery of supplies of local natural gas, in which case the distances and cost of transportation to other markets may well result in working out a low enough price for such local natural gas to make its introduction into the local Florida markets economically worth while.

In the Pacific Northwest, where the struggle between competing applicants to bring in natural gas is not yet settled, sharp competition from low-priced electricity for the domestic cooking, refrigeration, and water-heating loads and from low-priced oil for industrial loads, together with the need for substantial industrial sales to provide adequate total volumes for economic justification of the long-distance transmission lines, have placed an effective ceiling on the price the local distribution companies can afford to pay for natural gas at around 35 cents per MCF, Tippy said. He explained:

The principal distribution companies in the area, serving Portland and Seattle, produce oil gas efficiently but indicate they need large volumes of relatively low-priced natural gas if they are to be able to expand their markets

PUBLIC UTILITIES FORTNIGHTLY

materially in the face of competition. Both pipeline applicants seem agreed that they must deliver gas at around 35 cents per MCF and that this is about as low a price as either of them can establish to serve the area. . . . At any rate, service to the Pacific Northwest, if and when authorized, looks as though it will commence at or very near the economic ceiling on pipeline price.

NoR are these ceilings limited entirely to the extreme corners of the United States, Tippy continued. He noted a recent rate settlement concerning one of the major midwestern pipelines, in which special treatment was accorded one area on the ground that the low-priced electric competition it faced would not permit it to absorb its full share of the pipeline increase and still remain competitive locally. There was also rumor of a substantial volume of Williston basin gas having been without a major buyer for some time because the price asked by the producer would not permit its transportation to relatively near-by markets for resale at a retail price which would meet the competition of local low-cost solid fuels for domestic space-heating purposes. Tippy concluded:

These straws in the wind seem to indicate that the ceiling on the price of natural gas in the field is being approached-perhaps more rapidly than the producers and royalty owners are aware. Once again efficient manufactured gas processes and companies employing them can come out of the "doghouse" into which the vision of cheap natural gas placed them some years ago and again assume their rightful stature on their own merits. High-BTU oil gas is the lowest cost type of gas manufactured in the country today, but research goes forward on many fronts toward a process for complete gasification of coal, with promise of even lower costs, ultimately.

Tippy believes that higher natural gas prices will accelerate this search for acceptable substitutes, which in turn will establish and perhaps ultimately lower further the competitive ceiling for the price of natural gas.

Tudor Reassures Public Power Association

THE Interior Department proposes to function wholly within the framework of the applicable laws as they exist today with respect to marketing of federally generated power, Under Secretary of Interior Tudor told the American Public Power Association in Chicago early this month.

He said that as far as he knows there is no new legislation under consideration by the Congress which would change basic existing laws in this respect. Tudor brushed aside the contention that public power groups have anything to fear from the administration's new power policy. "Under the policy," he stated, "we propose to support federal participation in projects which for good and sufficient reasons cannot be undertaken by local interests."

If there is any basic change implied by the new policy, Tudor continued, it lies in the statement "that if there is a choice to be made between public and private power, this should be determined locally and by the people who are to be served. We are not going to take sides as between public and private interests in any local area. If the local people want public power or if

WHAT OTHERS THINK

they prefer private power, that is for them to determine. In these local discussions and arguments, we shall wish both sides well and may the best man win."

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In attempting to allay fears that the "preference" position of certain power customers of federal power will be jeopardized by the new policy, Tudor stated:

In this matter of preferred customers, I doubt very much if the federal government, for a long time to come at least, will ever have much power available to sell to any customers other than the preferred ones, except the substantial blocks heretofore contracted to certain industrial customers. As a matter of fact, we will not likely have enough to satisfy the needs of preference customers except in a few relatively limited areas.

Tudor admitted that, in reviewing power rates from time to time as required by law, "in some instances this may mean some increases in existing rates due to the increased cost of construction in recent years." He pointed out that before the war some hydroelectric projects were built which cost less than \$100 per kilowatt of installed capacity. Today most projects

cost about \$300 per kilowatt. "This certainly does not mean that our rates will increase three times or any such amount," Tudor assured the association. "It does mean, however, that we must be realistic and face some increases."

Tudor said the Interior Department intends to bend every effort to avoid placing any of the government's power customers in financial difficulties owing to a rise in power rates. He stated:

We cannot price our power out of the market or be responsible for forcing our customers into receivership.

This may mean, in the case of many projects that have been built and are operating or that are about to be brought into operation, that we cannot fix rates to return the investment properly allocated to power within fifty years. If that happens, he stated, the department must and will be realistic.

He assured the association, however, "that we are not going to raise rates for any of the power for which we are the marketing agency unless we have to and then only within limits which will permit our product to remain salable." Tudor said the department fully realizes the value to the country of low-cost power.

—F. M.

Notes on Recent Publications

MARKING HAZARDS TO AIR NAVIGATION.

Newly revised recommended standards for marking and lighting obstructions to air navigation have been announced by F. B. Lee, Administrator of Civil Aeronautics, U.S. Department of Commerce.

Detailed information on the important responsibility of providing uniform night and day identification of natural and manmade obstructions is contained in a new 42-page publication, Obstruction Marking and Lighting.

The booklet tells and shows by diagrams and drawings the recommended methods of marking and lighting towers, poles, bridges, water towers, high ground, smokestacks, buildings, and other obstructions to air navigation of various heights.

Also covered by text and diagram is the marking of hazard areas where several obstructions are grouped together.

Recommended lamps and candle power for the different types of obstructions are included, along with other pertinent data.

PUBLIC UTILITIES FORTNIGHTLY

The CAA requires that it be given notice of any construction or alteration of structures which may by reason of their height and distance from a civil airway or landing area, become hazards to air navigation. Details of laws and regulations on this subject are carried in an appendix to the booklet, which states:

The Civil Aeronautics Administration desires to assist those contemplating construction which may present a potential hazard to air commerce in selecting locations for the structures which will create a minimum of interference with air operations; to recommend the proper obstruction marking and lighting to insure adequate protection to aircraft; and to minimize the possibility of damage to structures from collision by aircraft.

For this purpose each regional administrator has provided a special advisory service.

Interested contractors, engineers, and architects should avail themselves of this service so as to prevent delays in obtaining the necessary permits for the construction, as practically all state and local authorities refer descriptions of potentially hazardous construction to the Civil Aeronautics Administration for comment.

Information in the new booklet supersedes that contained in the Obstruction Marking Manual published in early 1951. Obstruction Marking and Lighting, 1953, U. S. Government Printing Office, Washington 25, D. C. Price 30 cents.

PROGRAM FOR PRACTISING LAW INSTITUTE SYMPOSIUM

(For news item, see page 685.) Hotel Statler, New York city June 7-11, 1954

June 7th, Morning Session

Message of welcome and program explanation. Field gas supply and field purchase contract discussion, including panel discussion of "open end" contracts.

Afternoon Session

State conservation orders. The effect of the Phillips decision, with panel discussion.

June 8th, Morning Session

Discussion of noncontested certificate proceedings and competitive situations. The position of coal and railroad interests discussed during luncheon.

Afternoon Session

Gas allocation proceedings. Carrier and transportation problems. Underground gas storage.

June 9th, Morning Session

Federal Power Commission rate increase problems. The basis for making rates, followed by a panel discussion. Current problems in gas regulation to be discussed during luncheon.

Afternoon Session

Proving a fair rate of return. Panel discussion on the effect of the commission's rate of return on gas company financing. Settlements in FPC rate cases.

June 10th, Morning Session

Proving fair value before state commissions. Economic depreciation, followed by a panel discussion and group luncheon.

Afternoon Session

Tariffs and service contracts. Customer problems under gas tariffs.

June 11th, Morning Session

Zone allocations. Determination and distribution of funds. Rate-making problems during conversion. Federal legislation.

MAY 27, 1954

The March of Events

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Practising Law Institute Symposium

WITH the co-operation and sponsorship of the American Gas Association, an intensive 5-day program on current legal problems of gas distribution and pipeline companies has been planned by the Practising Law Institute for the gas industry and its counsel. The curriculum (see program, page 684) covers many controversial and troublesome problems from wellhead to burner tip.

The lecturers and panel members have been selected for their expert knowledge in the fields they cover, including industrial executives and officials, leading counsel and practitioners, federal and state commissioners, and professional experts. The program is designed to stress discussions of practical experience—"what to do and how to do it"—suggestions with a background of interpretation of current decisions, pending legislation, and discernible trends.

The viewpoint of both pipeline and distributing companies will be presented. The registration fee (\$100) includes luncheon discussions in a private dining room at the hotel, and all material distributed. Early registration for those interested is urged, so that identification badges may be prepared in adequate time, and the institute assist in arranging hotel rooms and other accommodations.

The symposium will be conducted under the supervision of Harold P. Seligson, director of the Practising Law Institute. H. Carl Wolf, managing director of the American Gas Association, will welcome the members on the first day. The chairmen for the 5-day sessions will be, respectively, William A. Dougherty of Dougherty & White; James O'Malley, Jr., of LeBoeuf, Lamb & Leiby; Arthur Palmer of Winthrop, Stimson, Putnam & Roberts; George R. Perrine, chairman of the Illinois Commerce Commission; and Edwin F. Russell of Cullen & Dykman (Brooklyn Union Gas Company).

Arizona

Power Authority Makes Loan Payment

Full payment of a \$250,000 loan from the state was made recently by the Arizona Power Authority, with the approval

of the state legislature. Authority Chairman E. A. Thomas sent a check to the state treasurer for \$205,000, the final payment on loans from the state to place the authority on an operational basis.

PUBLIC UTILITIES FORTNIGHTLY

The state legislature loaned the authority \$100,000 in 1944 when it was created, and then appropriated an additional \$150,000 in 1948. Last June, the authority made its first payment of \$83,622, of which \$50,000 was principal, and the re-

mainder interest. The authority receives power from Colorado river projects and in turn sells it to the state's private power agencies.

Thomas said the authority now is on an entirely self-supporting basis.

Arkansas

Novel Pipeline Plan Pushed

THROUGH applications filed with the state public service commission early this month, the MidSouth Gas Company and eight east Arkansas municipalities asked permission to enter into a novel agreement whereby the cities would build pipelines and distribution systems and lease them to the company for twenty years.

Involved in the eight separate applications filed with the commission would be 68.5 miles of pipeline and \$949,400 in installations.

The company and municipalities, according to the applications, propose to enter into an agreement whereby the company would act as agent for them in procuring materials and constructing the lines and distribution systems; the municipalities then would lease the lines and systems to the company for operation for twenty years, after which time the company has an option to purchase. Approximate prorata costs to the communities would be paid by means of bond issues.

Seek to Curb Appliance Sales

Unfair competition by the Arkansas Louisiana Gas Company in its handling of air conditioning and refrigeration appliances and installations was charged in a petition filed with the state public service commission recently by the refrigeration and air-conditioning division of the Associated Mechanical Contractors of Arkansas

The petition asked the commission to order the company to "cease and desist" from its nonpublic utility operations.

First of its type to be presented to the state regulatory agency, which took no immediate action on it, the petition alleged that in 1952 and 1953 the gas company subsidized its nonutility operations to the amount of \$70,000 annually, and was using its assured profits as a protected monopoly "in a destructive competition with private enterprise."

The petition said the commission had authority under the state Public Utilities Act to stop "improper, unfair, and uneconomic business practices."

Georgia

Atlanta OK's Transit Sale

THE city of Atlanta recently withdrew its objections to the proposed sale of the Atlanta Transit Company, after signing a contract to protect the city government and riders.

The state public service commission was

informed that the board of aldermen had approved a 3-way contract with the Atlanta Transit System, Inc., which will buy the transit company. Under this contract, the Atlanta Transit System agreed that taxes and claims for injury will supersede other obligations of the company.

THE MARCH OF EVENTS

Michigan

Natural Gas Rates Reduced

Natural gas rates making effective the reduction of about \$2,900,000 a year ordered by the state public service commission on April 30th were recently put into effect by Consumers Power Company, effective as of May 1st.

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The state public service commission or-

der passed along to natural gas customers the effect of a Federal Power Commission order reducing the natural gas rates of the Panhandle Eastern Pipe Line Company. Practically all natural gas distributed by Consumers is purchased from Panhandle by the Consumers' subsidiary, Michigan Gas Storage Company.

New York

Gas Adjustment Factor

THE state public service commission announced recently it had accepted a tariff amendment filed by the Iroquois Gas Corporation, designed to introduce an escalator purchased gas adjustment factor

into its basic gas rates, effective May 21st. The company furnishes 900 BTU mixed gas service in Buffalo and Lackawanna and 1,000 BTU natural gas service to Salamanca and various villages in Cattaraugus, Erie, Livingston, and Wyoming counties.

Rhode Island

Governor Vetoes Utility Bills

A BILL he had advocated to compel Rhode Island utility companies to pay 45 per cent of the cost of operating the state public utilities division was vetoed by Governor Roberts this month, because it had been amended against his wishes to strip the director of the state department of business regulation of any control over public utilities and place full regulatory powers in an administrator within the executive department.

Roberts said the amendment would do violence to the state's administrative setup

and represented "a stand against stringent utility regulation." The state public utilities administrator now operates as a subordinate of the director of the state department of business regulation.

The governor also vetoed a bill which would have reduced from nine to six months the period in which the state public utility administrator must render a decision in cases involving mass transportation companies. Since the bill would permit the administrator to take nine months in the cases of all other utilities, Roberts said, it would "discriminate in favor of one utility."

Washington

Utility Loses Suit

THE Washington Water Power Company this month lost its suit for an injunction to prevent the Chelan Public Utility District from continuing with condemnation proceedings to acquire Washington Water Power properties.

Judge J. A. Adams ruled in superior court at Wenatchee the district can continue with its actions to take over by condemnation Washington Water's Chelan power dam and distribution system in Chelan county. A jury trial will be held on September 20th at Wenatchee to establish a fair value for the properties.



Progress of Regulation

Field Price of Gas and Accelerated Amortization Receive Major Attention in Rate Decision

THE decision of the Federal Power Commission to allow the field price, instead of determining the cost of gas produced by a pipeline company, is the outstanding feature of the Panhandle Eastern Pipe Line Company rate case. The refusal of the commission to pass on to customers the advantages of temporary tax savings by virtue of accelerated amortization is also noteworthy. The final result of the commission's investigation is a reduction in rates proposed by the company and put into effect under bond.

The commission also made findings, in line with past practices, as to depreciation, original cost rate base, working capital, rate of return, allocations of cost of service, and rate structures.

Field Price of Natural Gas

The ultimate public interest, in the opinion of the commission, will be better served by allowing, for gas produced by the pipeline company, a price reflecting prevailing prices in the field rather than a cost determined by applying the "rate base" method to this commodity. Less than one-fourth of the gas available for interstate transmission and sale during the test year (1952) came from Panhandle's own production, about one-fourth was purchased from its subsidiary, Trunkline Supply

Company, and more than half was purchased from independent producers. No one had questioned Panhandle's armlength gas purchase contracts, nor were Trunkline rates to Panhandle at issue in the proceeding.

The "rate base" approach involves transmission, compression, and other facilities and a consideration of recoverable cost of service and operating expenses chargeable to production. These include uncapitalized exploratory and developmental outlays such as delay rentals, geological surveys, and expense of drilling dry holes.

However, a determination of gas cost, the commission noted, would also involve a consideration of expenses and revenues associated with the extraction of liquid hydro carbons. Tax questions would have to be considered. The final cost would depend upon the settlement of many controversial questions.

Although in the past the commission had not allowed the field price as a substitute for cost of gas production, this was said to be the first time a complete record fully set forth the results of the two methods of gas pricing. Moreover, the commission did not recognize as valid a contention that it was bound by precedent in rate making; it must continually study the

problem and strive to improve rate methods.

Use of the rate base method of pricing pipeline-produced gas has received judicial "sanction," but the commission said that it was an overstatement to contend that it had been given unqualified judicial "approval." The commission referred to Supreme Court decisions and views of Supreme Court justices to support the conclusion that, although the court would not substitute its opinion for the expert judgment of the commission, it did not lay down any rule that the commission's past approach was the only proper approach.

Justice Jackson, in Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 51 PUR NS 193, said that the business had two components of quite divergent character. One was essentially a transportation enterprise consisting of conveying gas. The other part of the business was of opposite character, being more erratic and irregular and unpredictable in relation to investment than any phase of any other utility business. Gas, he said, could be directly priced more reasonably and easily and accurately than the components of a rate base could be valued. Hence, "the reason for resort to a roundabout way of rate base price fixing does not exist in the case of gas in the field."

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The interest of the public, said the commission, definitely lies in the direction of production by pipeline systems themselves as distinguished from their complete dependence for gas supply upon purchases from other producers. The commission cannot compel them to engage in exploration, drilling, and related development activities. Regulatory policies must be designed to encourage rather than to penalize such activities. The commission said it was struck by the fact that no new major pipeline certificated since the commission's past pricing practice was established

produced any significant portion of the total supply.

Accelerated Amortization

The commission said it was given no discretion to ignore certificates for accelerated amortization in accordance with a policy decision of Congress or to deprive the company of the tax savings authorized by Congress. Congress offered those tax savings as an inducement for investment in properties regarded essential for national defense purposes. This inducement would be lacking if tax savings were passed on directly to customers. The commission added:

It is equally clear that Congress did not intend by § 124A to provide a fund which could be diverted by Panhandle to the payments of dividends to its shareholders. Since the possession of a certificate of necessity is essentially a deferment of tax liability, the accruals for taxes in excess of those actually paid should logically be treated by Panhandle, not as free and unrestricted income, but earmarked to provide for the future meeting of such liability.

Depreciation and Amortization

A claim by Panhandle of a rate of 4 per cent of gross plant for depreciation and amortization was rejected. The commission's staff had recommended a rate of 3.22 per cent. A composite depreciation rate of 3.46 per cent was approved after consideration of past accruals, useful life of facilities, life curves, and retirements.

Rate Base

The commission allowed for working capital one-eighth of cash operating expenses, exclusive of purchased gas, plus average materials on hand and prepayments, minus 75 per cent of federal income tax accruals. Accrued depreciation was

PUBLIC UTILITIES FORTNIGHTLY

deducted, as well as contributions in aid of construction.

Rate of Return

The company's request for a $6\frac{1}{2}$ per cent return was denied and a return of

5\frac{2}{4} per cent was allowed on the basis of debt cost 2.90 per cent, preferred stock cost 4.02 per cent, and common equity cost 11.41 per cent. Re Panhandle Eastern Pipe Line Co. Docket Nos. G-1116 et al. Opinion No. 269, April 15, 1954.

3

Federal Power Commission Prescribes Rapid Amortization Accounting Procedure for Gas Companies

ACCOUNTING procedures were prescribed by the Federal Power Commission for the federal income tax consequence of gas companies employing accelerated amortization of defense facilities. In an earlier proceeding (2 PUR3d 41) the commission had treated the rate-making aspects of the problem.

Reserve Fund Requirement

The commission directed that any company obtaining an emergency certificate from the Internal Revenue Bureau, permitting defense construction to be depreciated over a 5-year period instead of its normal life, set up a reserve to which each year's tax savings would be credited.

Postamortization Accounting

After the 5-year period of rapid amortization, the company should make a

monthly charge against the reserve accumulated over the 5-year period of an amount equal to the additional tax payable because of the company's inability to claim any depreciation. This same amount should be credited to an account set up to cover federal income taxes deferred in prior years. The commission specifically ordered that each monthly amount credited should be sufficient to amortize the balance in the reserve applicable to any facility over its estimated remaining life.

Finally, restrictions were imposed on the use of the reserve for the purposes above described. Any balance remaining in the reserve after the retirement of the property could be disposed of only as directed by the commission. Re Amendment to Uniform System of Accounts for Natural Gas Companies, Docket No. R-126, April 21, 1954.

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Distribution of Joint Expenses of Gas Companies in Holding Company System Considered

THE Wisconsin commission, in allowing a gas company a modified rate increase, made a careful examination of the methods used in allocating joint administrative and general expenses among the various companies of a holding company system. The commission conceded that the allocation of these expenses is not an exact science and can be accomplished in

many ways which give results within the zone of reasonableness.

Factors Affecting Allocation

Company counsel claimed that if a formula allocation is used, plant in service should not be a factor but the allocation should be on the basis of gas revenues and meters in service. He also claimed that

PROGRESS OF REGULATION

plant investment in subsidiary pipelines and gas revenues from interruptible industrial customers should not be considered in the allocation factor. The commission could not agree with the first contention and called attention to an earlier case in which the matter had been decided. The commission said:

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... this commission approved a procedure whereby such expenses, other than injuries and damages, employee welfare expenses, and pensions, are apportioned on the basis of the ratios which the amount of gross operating revenues, utility plant in service, and supervised operating expenses for each utility department bears to the total for all utility departments. This procedure was decided upon after a study by our staff and the interested Wisconsin utilities.

On the second claim, as to pipeline investments and revenues from interruptible customers, the commission expressed the belief that "both of these items have an effect on the amount of total administrative and general expense incurred by the system and may not properly be ignored in the allocation of the expenses."

The commission concluded its consideration of the allocation question with this comment as to the two types of evidence presented:

The commission staff has made a comprehensive analysis of the holding company expenses and of the allocation thereof among companies of the system and to Wisconsin. The result is an objective analysis which is to be given greater weight than the self-serving claim of the utility inadequately supported by factual data.

Adjustments in Expenses

Many adjustments were made in the company's expense account. Two of these pertained to payments to a bottled-gas affiliate and a loss on a kitchen display unit. The company, upon taking over fringe area customers originally served by a bottled-gas affiliate, paid the affiliate \$10 per customer. This was disallowed with the comment that no such payment was made to nonaffiliated competitors from whom customers were taken.

The kitchen display unit had been carried on the company's books in the merchandising and jobbing inventory. When it was sold, the loss on the sale should have been charged to merchandising.

While the proper return for the company was found to be 6.5 per cent, the commission allowed a return of 6.96 per cent "as a cushion and to meet any possible offset against adjustments made herein." Re Central Wisconsin Gas Co. 2-U-4119, April 13, 1954.

g

Who Should Own and Maintain Street Laterals?

THE Wisconsin commission ruled that regulations and practices of a municipal water utility which required the customer to maintain and replace street laterals were unjust and discriminatory. The commission indicated that it had always believed that these laterals which connect the home owner's water lines to the utility's mains should be part of the utility

plant and repaired and maintained by the utility.

The commission directed the utility to institute the practice of maintaining the laterals itself, to replace them as they become unservicable, and to add the cost of replacement to the value of plant on its books. Re City of Oshkosh, 2-U-4144, April 1, 1954.

PUBLIC UTILITIES FORTNIGHTLY

Future Construction Included in Rate Base

The New Jersey board faced the question whether it should allow a water company to include \$1,000,000 in its rate base for contemplated capital improvements. Previously the company had been required to present recommendations for correcting service deficiencies. The results of a survey suggested the proposed expenditures to correct the defects. The company, stating that it intended to carry out the recommendations, argued that the amount should be included in the rate base

Municipalities involved had offered no alternative suggestions to remedy service deficiencies, nor did they allege that the estimate was excessive. After examining the record as a whole, the board agreed with the company.

Though at first glance, the board said, the allowance might seem unfair to the consumers, who would be charged rates on property yet to be built, other factors had to be considered as well. The company had already expended some funds in preliminary surveys. The major projects

would be in plant and equipment for the greater part of the year. Financing to provide necessary construction funds had to precede actual construction. Although the costs had not yet been incurred, they were so imminent that inclusion was justified.

Rate Base Calculation

The board, in determining the rate base, gave no weight to a calculation based on a 1926 valuation, with subsequent additions, repricing of retirements, and depreciation adjustments. This, said the board, produced "a noncharacterizable rate base, composed of several nonrelated elements, which in itself would seem of doubtful value," but in addition, was subject to all of the "infirmities of reproduction cost." Even the company witness had admitted that such a rate base did not adhere to the required criterion of fair value.

A return of 5.8 per cent was deemed fair, and an increase designed to provide such a return was authorized. Re Plainfield-Union Water Co. Docket No. 7661, March 24, 1954.

B

Gas Rate Increase Denied for Lack of Proof

A MOTION by a community organization to dismiss a gas company's application for a rate increase was granted by the West Virginia commission. A countermotion by the company to exclude the organization from participation in the hearing was denied.

The commission first pointed out that any public utility seeking to increase rates has the burden of showing that its proposal is just and reasonable. This, the commission said, the company failed to do.

Justification of Increase Denial

The company's books and records for the test year did not reflect its operating expenses in accordance with commission orders and did not afford a basis for segregating those expenses between the two states in which the company operated. The commission appeared to point to the need for a full-scale rate proceeding when it observed that the commission's staff had not made an examination of the company's books for many years and that the most recent rate increase which the company had received was the result of a compromise agreement between the company and protesting consumers and not based upon a determination of plant values or operating costs. Re Cumberland & Alleghenv Gas Co. Case No. 4029, April 16, 1954.

PROGRESS OF REGULATION

Engineer's Absence Affects Weight Given Appraisal

THE New Jersey board allowed a water utility a return of 6 per cent on a book value rate base. The company's books had been recently reviewed and approved by a firm of independent auditors.

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Evidence was offered by the company as to the replacement value of its plant and equipment. This evidence consisted of a written report of a professional engineer who had examined the company's properties. The board refused to accord this appraisal any weight because the engineer who made the appraisal was not produced as a witness. The board indicated that unless it were given an opportunity to cross-examine the engineer as to the elements included in his appraisal, the value of his findings would be questionable. Re Colonial Manor Water Co. Docket No. 5801, March 24, 1954.

d)

Burden of Proof on Customer Attacking Minimum Charge

THE Pennsylvania commission dismissed a customer's complaint against a water company's minimum quarterly charge of \$5.70 for the first hundred cubic feet of water. The substance of the testimony was an unsupported statement that the rate was a "service charge"; "disproportionate, ridiculous, and outrageous."

The commission did not consider that the charge was necessarily improper in relation to the rate schedule as a whole and ruled that in the absence of evidence on which a finding as to the fairness of the rate could be based, the complaint should be dismissed. Persons seeking to overthrow a utility rate, the commission concluded, have the burden of proving that it is unreasonable or unfair. Lerch v. Sinking Spring Water Co., Inc. Complaint Docket No. 16032, March 29, 1954.

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Other Important Rulings

Discontinuance Enjoined. The New York supreme court, in an action for a permanent injunction, issued a temporary injunction enjoining a gas company from discontinuing service until the court could determine whether an alleged oral service agreement contravened express statutory policy, where the customer would suffer hardship from immediate discontinuance. Langevin et al. v. Binghamton Gas Works, 128 NYS2d 382.

Moot Appeal. A protesting carrier's second appeal from the commission's granting of a certificate to another carrier was dismissed by the Ohio supreme

court where the case had become moot by virtue of the other carrier's having withdrawn its application and moved for a dismissal prior to the perfection of the second appeal. Commercial Motor Freight, Inc. v. Ohio Pub. Utilities Commission, 117 NE2d 695.

Demurrage Claim Disallowed. A railroad seeking to recover past demurrage from a corporation owning extensive track and yard facilities, which the railroad had used as its own yards for sorting and marshaling cars, on the theory that the demurrage should have been calculated from the time of the delivery of the cars

PUBLIC UTILITIES FORTNIGHTLY

to the yards or when empty cars were to be reloaded, was not allowed to do so by the United States court of appeals, where the parties had correctly interpreted the filed tariffs as meaning from the time of spotting and placing the cars at the loading points, and the corporation had been paying on that basis since 1921. Southern Railway Co. v. Aluminum Co. of America, 210 F2d 139.

Small Company Return. The Indiana commission considered a return of 7 per cent on an original cost rate base, which did not include an allowance for materials and supplies, reasonable for a small telephone company. Re Craigville Teleph. Co. No. 24904, April 1, 1954.

Question on Appeal. The California district court of appeals held that a motor carrier's claim that a penalty imposed by the trial court for rate violations was excessive could not be raised on appeal unless first presented to the trial court on a motion for a new trial. People v. Alves, 267 P2d 858.

Train Discontinuance. The Wisconsin commission allowed a railroad to discontinue certain passenger trains where the losses which would have been incurred from continued operation outweighed the inconvenience which would result from the use of other transportation facilities by the public. Re Chicago & N.W.R. Co. et al. 2-R-2682, April 20, 1954.

Titles and Index

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Public Utilities Reports (3d Series) are published in five bound volumes a year, with the P.U.R. Annual (Index). These reports contain the decisions of the state and federal regulatory commissions, as well as court decisions on appeal. The volumes are \$7.50 each; the Annual (Index) \$6.00. Public Utilities Reports also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

PUBLIC UTILITIES REPORTS

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Re Pittsfield Coal Gas Company

D.P.U. 9757 February 18, 1954

I NVESTIGATION as to propriety of proposed natural gas rates; proposed rates canceled, new rates prescribed.

Valuation, § 299.1 — Working capital allowance — Tax accruals.

1. Tax accruals, when computed after taking into consideration delayed payments for purchased gas, were considered sufficient for working capital in determining a natural gas company's rate base, p. 4.

Valuation, § 250 — Rate base determination — Property paid for by customers.

2. Plant which has been paid for by a natural gas company's customers should be excluded from the company's rate base, p. 4.

Valuation, § 209 - Rate base determination - Standby gas plant.

3. A manufactured gas plant of a company which had converted to natural gas was allowed to be included in the rate base, where the plant had a capacity representing practically a 100 per cent standby production capability and where it was necessary to prevent losses if the natural gas pipelines through which the company was being furnished with gas should be broken, p. 4.

Return, § 26 — Cost of capital — Debt ratio.

4. The actual debt ratio of 34.2 per cent was deemed proper for the purpose of fixing a gas company's rates (although it was conceded that such a ratio was probably an uneconomic capitalization under present conditions) where the company had not recently been obliged to go into the market for equity financing and all of its new financing had been accomplished by the issuance of long-term debt, and where the company was an independent operating unit whose stock was publicly held, p. 5.

Return, § 26 - Cost of capital.

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5. It is improper to base the fair cost of equity money to a natural gas company upon a historical stock price averaged over a period of ten years, p. 5.

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MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Return, § 26 - Cost of capital - Earnings-price ratio.

6. An earnings-price ratio of about 7.88 per cent was deemed proper to use as the cost of equity money in determining natural gas rates, in view of recent market prices, using a 75 per cent pay-out ratio, p. 5.

Rates, § 375 — Natural gas — Minimum charges.

7. A natural gas company's rate schedule should include a first step rate of at least one dollar so that the burden of furnishing gas service may be equitably distributed, p. 6.

Payment, § 25 — Prepayment meters — Natural gas company.

8. A natural gas company was ordered to consider the desirability of ceasing to render service through prepayment meters, since that type of service is uneconomical and opens the door to possible discrimination, p. 6.

Rates, § 49 — Commission duties — Contract negotiations.

9. The commission should not interfere in rate contract negotiations with a large industrial customer unless the special contract results in detriment to the public, p. 7.

APPEARANCES: Francis J. Quirico, for Pittsfield Coal Gas Company; Paul A. Tamburello, City Solicitor, and Edwin E. Reder, Associate City Solicitor, for city of Pittsfield; Edward N. Gadsby, Counsel, for department.

By the DEPARTMENT: Pittsfield Coal Gas Company filed, effective October 25, 1951, its M.D.P.U. Nos. 59 to 66, inclusive, which included new schedules of rates and charges for gas throughtout its territory applicable to all classes of consumers. These rates were promulgated to meet the situation resulting from the introduction of natural gas, which was first made available to respondent at about that time. Such rates were stated by respondent to be designed to decrease its over-all revenues from its consumers by about 5 per cent. Since the rates theretofore in effect were not appropriate for use under the changed conditions and since the new schedules were stated to represent a reduction to the consumers, though relatively minor in extent, the department allowed them to go into effect without suspension and an investigation was ordered as to their propriety. A public hearing was held in connection with such investigation in Pittsfield on December 2, 1952, which was continued in Boston on January 26, March 5 and 6, and April 28, 1953. The annual returns to the department of the company for the year ending December 31, 1952, were made a part of the record in these proceedings. The city of Pittsfield appeared by its city solicitor and participated in the hearings.

Pittsfield Coal Gas Company, as its name implies, is in the business of selling gas at retail in Pittsfield and the surrounding territory. As of December 31, 1952, it served 12,479 customers' meters in Pittsfield and a total of 2,620 more in the towns of Dalton, Lenox, Lee, Stockbridge, and Lanesboro. Its balance sheet as of that date (as condensed) compared with the previous year is as follows:

Of the \$875,000 shown on this balance sheet to be outstanding in long-term debt as of December 31, 1952, \$225,000 represents the unamortized

RE PITTSFIELD COAL GAS CO.

Ass	ets	
	12/31/51	12/31/52
Plant and equipment Other investment	\$2,508,559 32,204	\$2,575,606 8,163
Total investment	\$2,540,763	\$2,583,769
Cash Materials and supplies Other current assets	\$66,130 89,620 127,118	\$73,862 81,372 102,421
Total current assets Prepaid accounts	\$282,868 \$10,852	\$257,655 \$10,745
Debt discount and ex- pense	19,633 234,784	18,831 218,836
Total unadjusted debts	\$254,418	\$237,667
Total assets	\$3,088,901	\$3,089,836
Liabil	ities	
Common stock Premium Long-term debt	\$1,000,000 106,500 900,000	\$1,000,000 106,500 875,000
Total capitalization	\$2,006,500	\$1,981,500
Current liabilities Accrued liabilities Depreciation reserve Other reserves Contributions for ex-	\$82,024 33,518 630,503 26,282	\$72,049 41,154 656,660 28,889
tensions Surplus	24,438 285,635	24,438 285,146
Total liabilities	\$3,088,901	\$3,089,836

portion of the amount borrowed to finance the conversion of customers' appliances. The balance of the cost of conversion, before amortization, at the end of the year was \$243,449. The balance at the end of the year, after amortization, is shown under other deferred debits in the amount of \$218,-836. The cost of conversion was about \$15.87 per meter, which is very low in comparison with other companies in the state. Of the amount of \$81,372 appearing under Materials and Supplies, \$21,708 consisted of an investment in merchandising inventory which must be deducted in computing the original cost of property used in the utility business.

Respondent was last before us in connection with its rates in 1946 and 1947 (D.P.U. 7536, 68 PUR NS 87, and 7841), when it was given certain relief by way of increased rates. Its operations at that time, however, involved manufactured gas alone, which posed substantially different problems from those under natural gas. It commenced the purchase of natural gas in October, 1951, and its results for the year 1952 are for the entire year under the conditions surrounding the distribution of this latter commodity. It shows net income available for dividends and surplus for the year 1952 of \$38,631, after taxes and including a small amount of nonoperating income. Treating as an operating expense that portion of its interest account attributable to carrying charges on the average unamortized conversion expense for the year, its gross income before interest was \$63,337. The most recent estimates for 1953 indicate that it will end the year with a net profit transferable to profit and loss of about \$65,-149, and a gross income before interest except on conversion loans of about \$91,726. The improved earnings position for 1953 is anticipated in large measure because of the normalizing of certain extraordinary expenses incurred in connection with the advent of natural gas. These expenses, consisting principally of extraordinary maintenance of customers' equipment and meters, losses due to high percentage of unaccounted-for gas, and extraordinary main repairs necessitated by such leakage, are expected to taper off and some will vanish during the year. Careful scrutiny of these estimates gives us no ground to modify them in any material respect. While they are

no part of the record, actual results for the seven months ending July 31, 1953, show gross income, computed as before, of \$51,365 as compared with a similar figure for the similar period in 1952 of \$38,140. By extending these figures at the same relative rate of growth as shown in 1952, we arrive at an estimate for 1953 based on seven months' actual figures of \$85,380 as compared with the previous estimate for the year which we have noted of \$91,726. The rate for purchased gas under respondent's contract with Northeastern was increased, effective April 1, 1952, which increase has since become firm. Re Northeastern Gas Transmission Co. FPC Docket No. G-1814, order dated February 12, 1953. The failure of respondent to realize more substantial savings upon the introduction of natural gas and to be able to offer more substantial rate reductions is understandable when it is realized that the maximum development rate under this contract has increased from 43 cents, when the contract was signed, to 53 cents at the present time, an increase of almost 25 per cent.

[1, 2] Respondent's gross investment in utility operating plant as of December 31, 1952, was \$2,551,168. There is no evidence as to the cost of proposed additions during 1953, and we are compelled to use the amount so stated. Its depreciation reserve as of that date amounted to \$656,660, and its net plant investment was, therefore, \$1,894,508. Materials and supplies allocable to the gas business amounted to \$64,485. We find that cash working capital requirements are adequately provided for from tax accruals, when computed after taking

into consideration delayed payments for purchased gas. Re Lynn Gas & E. Co. (1953) D.P.U. 10056, 97 PUR NS 147. Respondent carries plant at cost of \$24,438 which has been paid for by its customers and which should be excluded from the rate base. Accordingly, we find that respondent has invested in property used and useful in its utility operations the amount of \$1,934,555, and that this represents the value of such property. We adopt this figure as the proper rate base for use in these proceedings.

[3] At the time that respondent converted to the use of natural gas, it was, contrary to the implication of its corporate name, manufacturing gas exclusively by the water gas method. Incident to such conversion, it modified its water gas sets to produce high Btu oil gas appropriate for standby and peak-shaving purposes. This plant has a capacity representing practically a 100 per cent standby production capability. A question was raised at the hearing as to whether that portion of respondent's investment represented by such facilities is prudently invested in utility property and hence properly a part of the rate base. Aside from the question as to whether we should so interfere with a decision of management, we are fully aware of the geographical location of New England in general and Pittsfield in particular, and of the critical situation which might arise in case of a break in the line through which respondent is now being furnished with gas. Furthermore, to abandon an existing major investment in this way would entail very serious problems of accounting treatment and amortization. Furthermore, it would leave the company

without the ability completely to control its cost of purchased gas, unless it were to install propane equipment for such purpose. To abandon existing plant and to install new plant designed to accomplish the same purposes served by the abandoned plant seems to us to be economic waste. See Re Worcester Gas Light Co. D.P.U. 9877, 1 PUR3d 300. We cannot find that the rate base we ought to use in these proceedings should be modified by elimination of the investment represented by any of respondent's producing plant.

[4-6] Respondent's balance sheet shows it to be capitalized at a debt ratio of about 34.2 per cent. While this is probably an uneconomic capitalization under present conditions, it appears that it has been many years since respondent has been obliged to go into the market for equity financing, and all of its new financing in recent years has been accomplished by the issuance of long-term debt. Respondent is an independent operating unit, its stock being publicly held. Under these circumstances, we will adopt the actual debt ratio as proper for use in this case. The aggregate cost of its existing debt is 3.74 per cent.

Respondent's stock was, at the time of the hearing, held by some 263 stockholders, mostly resident in Massachusetts, and there are some rather fragmentary market quotations. In 1952 it earned \$3.86 a share and paid dividends of \$4, at which rate it has been paying (with a few exceptions) for many years. It was selling during 1952 at an average price of \$67, representing a dividend-price ratio, or yield, of 5.9 per cent. It has paid out an average of 72.4 per cent of its earn-

ings as dividends during the past ten years. Net earnings available for dividends of \$38,600 in 1952 represented a return of 2.8 per cent on its equity funds. There was testimony that the fair cost of equity money to respondent would be at the rate of 8.7 per cent on a 75 per cent pay-out ratio. This opinion was, however, based upon a historical stock price averaged over a period of ten years, and this approach to the problem of the cost of equity money has been held to be improper (New England Teleph. & Teleg. Co. v. Department of Public Utilities (1951) 327 Mass 81, 88 PUR NS 73, 97 NE2d 509). On the basis of recent market prices, using a 75 per cent pay-out ratio, the earnings-price ratio would be at about 7.88 per cent, which we find to be the proper figure to use as the cost of equity money in these proceedings.

On the basis of the existing capitalization and using the capital costs we have found, the aggregate cost of money to respondent would be about 6.47 per cent. To earn this return on the rate base we have found would require respondent to have gross income before interest, but after carrying charges on conversion notes, of about \$125,000. None of the estimates of respondent's earnings, making all possible allowance for the various factors brought out and discussed at the hearings, approach within striking distance of this figure. Accordingly, we conclude that the earnings shown by respondent under the rate schedules under investigation are not unreasonably high nor more than it is entitled to under the familiar legal principles by which we must be guided.

The company's territory has been

divided into two zones for rate purposes, as the result of which one schedule of rates is applicable to customers in the first zone, comprising Pittsfield and Dalton and a slightly higher schedule in a second zone which includes the more outlying districts in Lenox, Lee, Stockbridge, and Lanesboro. Its basic domestic schedule in the first zone includes a rate of 34.5 cents per Ccf without step rates of any kind. Rates for use for water heating, refrigeration, and house heating are included in other schedules, all of which start at 65 cents for the first Ccf and are stepped down thereafter. A similar plan at a higher level is followed in the second zone.

An analysis of its operating statistics in 1952 shows clearly that, for a very substantial number of customers using relatively small amounts of gas, these rate schedules, and particularly the domestic rate schedules, allow service to be rendered at less than cost to the company. Without going into a complicated cost analysis it is clear that, under its present operations, practically the only cost which varies directly with use is the cost of purchased gas. In 1952, this item represented \$197,936 out of total operating expenses of \$682,133. This indicates a cost of somewhere around \$2.68 a month per customer which is incurred by the company regardless of the amount of use. It also appears that about 70.9 per cent of customers served under the Limited Domestic Rate D-1 pay less than this amount per month for service. On the other hand, only 16.7 per cent of customers on the D-2 (hot water and refrigeration) rate pay less than \$2.68 a month, and presumably few or none

of the customers on the house-heating rates.

[7] A first step rate of under one dollar is almost unknown in other gas companies in the state, and there is a tendency on the part of careful management to design rate schedules with a first step in excess of one dollar. We believe that such a schedule to apply to the basic schedule is necessary if the burden of furnishing gas service is to be equitably distributed. It is quite apparent, we believe, that the same minimum rate should apply on all other schedules.

[8] It may be pointed out that such a rate schedule would not be feasible in connection with the use of prepayment meters. There are still in use in respondent's territory 203 domestic meters and 3 commercial meters of this type, with gross annual revenues of \$3,386, or about \$1.37 per month each. There is, of course, some additional cost of serving such meters over and above the regular meters. It is apparent to us that respondent should consider the desirability of ceasing to render this type of service, which seems to us to be uneconomical and opens the door to possible discrimination. See Re Greenfield Gas Light Co. (1953) D.P.U. 10232.

In the ordinary case, we do not like to interfere with the prerogatives of management to establish its own rate schedules, and we have never done so without first consulting them as to their local problems. See Re New England Teleph. & Teleg. Co. (1954) D.P.U. 10349, 2 PUR3d 501. However, in a situation such as that now before us, it seems to us proper that we should make use of the very full record which we have and that we

ought to prescribe the rates hereafter to be charged. This will avoid any necessity for duplication of testimony which is already inordinately voluminous. See Re Western Massachusetts Electric Co. D.P.U. 9658; Re Cambridge Electric Co. (1952) D.P.U. 9781, 96 PUR NS 77. Such schedules have, therefore, been designed and are included in the order part of these findings. We find that the existing schedules of rates and charges do not distribute costs in a fair and equitable manner and that the schedules which we are ordering to be placed into effect are fair, reasonable, and nondiscriminatory. It is estimated that the new schedules will result in a decrease in respondent's gross revenues of about \$3,750, which we believe will not materially affect its earnings position. They will increase the cost of gas to about 50 per cent of respondent's customers who have heretofore been the beneficiaries of service at less than cost, but will include decreases to about 50 per cent thereof. Such decreases are in varying amounts, ranging from a few cents a month to substantial sums. We believe that the decrease in the cost of gas at higher-use steps will be of assistance to respondent in competing with other fuels, and that the schedules so designed are necessary if this enterprise is to continue on a sound economic basis.

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[9] The General Electric Company intervened in these proceedings, and, in substance, asked the department to order the respondent to sell gas to it at a lower price than it is presently charging. This customer is served under a special contract. It is probably necessary to have such an arrangement in this particular case, in

view of the relatively huge amounts of gas called for by this one account. General Electric buys about 5,500,000 cubic feet monthly, or about 17 per cent of respondent's total purchases of natural gas. Its contract price is about \$1.72 per Mcf. The only filed rate available to it would cost it in the neighborhood of \$1.80 per Mcf. We do not believe we are called on to interfere in the negotiations between parties of a special contract unless it results in detriment to the public. Wellington Grill, D.P.U. 8283, Dec. 9, 1948. There was some discussion in the record of the possibility of a contract on an interruptible basis, but there is no data upon which we could find whether such a contract would be feasible or in the public interest. The customer has his remedy, of course, in case it is completely unable to negotiate what it considers to be a fair contract. See G.L. Chap 164, § 92.

Both parties filed requests for rulings. If the provisions of § 5 of Chap 25 as it stood at the time are applicable, the 10-day limitation therein contained was waived by the parties. We grant the request of the city of Pittsfield numbered 1. We deny its request No. 2 on the ground that it is not applicable to this record. Of the requests filed by Pittsfield Coal Gas Company, we grant Nos. 1, 6, 7, 8, 9, 12, 14, 15, 16, 17, 18, 19, 21, 23, 24, 25, and 26. We deny its requests Nos. 2, 3, 4, 5, 10, 11, 20, 22, and 27. We deny its request No. 13 as unnecessary in view of our findings herein.

For the foregoing reasons, after due notice, investigation, and consideration, it is hereby

Ordered: That the rates and charges for gas stated in M.D.P.U. Nos. 59

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

to 66, inclusive, filed by Pittsfield Coal Gas Company to be effective October 25, 1951, are hereby canceled as of the effective date of the tariffs hereinafter ordered to be placed into effect; and it is further

Ordered: That Pittsfield Coal Gas Company file on or before March 15, 1954, to be effective as to meter readings on and after April 1, 1954, new schedules of rates and charges for gas which shall include the following rates available as shown:

Domestic Rate

Available for all domestic use.

	ittsfield d Dalton	Balance of territory
First 200 cf per mont or fraction thereof	\$1.00	\$1.10
Next 1300 cf per Ccf	.29	.31
Next 1500 cf per Ccf	.25	.25
Over 3000 cf per Ccf	 .16	.16

House Heating Rate

Available for all gas used by residential customers who use gas as the principal heating fuel, and for heating purposes only, with a separate meter, for commercial customers. If dual fuel burners with automatic outside tem-

perature controls are used in connection with commercial heating installations, no demand charge is applicable.

	Pittsfield and Dalton	Balance of territory
Demand charge, month for f 25,000 Btu per h input rating of he ing unit, or fract	our eat-	
thereof Each additional 1,	\$2.00	\$2.00
Btu input rating Commodity charge	08	.08
First 200 cf per mo or fraction ther		\$1.10
Next 1300 cf per Next 1500 cf per Over 3000 cf per	Ccf .29 Ccf .25	.31 .25 .07

Commercial Rate

Available for all uses not covered in other rates.

First 200 cf per month		
or fraction thereof	\$1.00	\$1.10
Next 4800 cf per Ccf	.33	.36
Next 8000 cf per Ccf		.30
Next 12000 cf per Ccf		.26
Next 25000 cf per Ccf		.22
Over 50000 cf per Ccf	.18	.18

And it is further

Ordered: That the investigation by this department in D.P.U. 9757 be and the same hereby is terminated and closed.

Re Republic Light, Heat & Power Company

January 14, 1954

 R^{EQUEST} by villages for suspension of proposed gas rate and for public hearing; denied.

Rates, § 376 — Cost of gas after conversion — Need for investigation.

1. The mere fact that natural gas at lower cost is to be substituted in part for manufactured gas does not justify an immediate reduction in rates or even require an investigation, where a company is not presently earning a fair return and where the cost of the mixed gas service, which will result after the conversion, will involve many factors besides the cost of gas alone, p. 9.

Rates, § 376 — Cost of gas — Effect of conversion.

2. The time to consider the propriety of the rates of a gas company in the process of converting from manufactured to natural gas is when the conversion has been completed and the costs, not only for the purchase of gas but for required capital expenditures, for conversion of customers' equipment, and for rehabilitation of the property, can reasonably be determined, p. 9.

By the Commission: The Republic Light, Heat and Power Company has filed amendments to its schedule for gas service in the Niagara District, which includes the cities of Niagara Falls, Tonawanda, and North Tonawanda and the village of Kenmore and adjacent territory, which provides for a method of billing customers during the conversion from manufactured gas to mixed gas which is to be carried out during the period from now to October 1, 1954, in accordance with the authorization granted in Case 16524. The billing makes no change in the base rates for service at 540 Btu but provides means for converting the amount shown by the meters of customers served with higher Btu mixed gas to the equivalent

of 540 Btu, so that all customers will be served at the same rates on a Btu basis. The filing makes a nominal reduction of about \$50,000 by the elimination of a purchased gas surcharge.

[1, 2] The village of Kenmore and the town of Tonawanda have requested that the filing be suspended and that a public hearing be called for the purpose of investigating the rates of Republic. These requests should be denied. Suspension of the filed rates would accomplish nothing except to make it impossible for the company to proceed with its program of conversion, since it would have no rates at which to bill customers receiving higher Btu gas. The rates for manufactured gas were considered at

NEW YORK PUBLIC SERVICE COMMISSION

length in the opinion in Case 15717 and it was found that the earnings of the company for this service were materially below a fair return, but increases were allowed only sufficient to earn a return of 4 per cent for reasons set forth in great detail in the opinion in that case. The problem of supplying gas at reasonable rates for this territory has been the subject of great concern and study and hard work by the commission for several years past and it does not intend to neglect the matter or to cease its activity in this regard until the best possible solution is finally reached. The supply of gas, however, is the most important element and the one which must be solved first before the matter of rates can reasonably be determined. The mere fact that natural gas at a lower

cost is to be substituted in part for manufactured gas does not justify an immediate reduction in rates or even require investigation. As previously set forth, the company is not now earning a fair return in this territory and the cost of mixed gas service when it is finally established will involve many factors beside the cost of gas alone. When the conversion has been completed and the costs, not only for the purchase of gas but for required capital expenditures, for conversion of customers' equipment and for rehabilitation of the property, can reasonably be determined, the matter of rates will be considered. There certainly is no reason to believe that the company will earn an excessive return from the service in this territory meanwhile.

WYOMING PUBLIC SERVICE COMMISSION

Re Cheyenne Light, Fuel & Power Company

Docket No. 9248 February 19, 1954

Petition by gas and electric company for temporary natural gas rate increase; modified increase authorized.

Rates, § 143 — Gas — Increased wholesale cost.

1. A gas and electric company which could not absorb the total amount of the increased cost of wholesale natural gas and continue to earn a reasonable rate of return was granted a temporary rate increase, p. 13.

Valuation, § 290 - Working capital - Tax accruals - Property included.

2. The working capital allowance of a gas and electric company seeking a temporary rate increase was considered excessive where plant under construction and property held for future use were included in the rate base and large amounts of accrued taxes were on hand, p. 15.

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RE CHEYENNE LIGHT, FUEL & P. CO.

Rates, § 143 — Natural gas — Increased wholesale cost — Temporary rate increase.

3. A gas and electric company was granted a temporary rate increase to cover approximately 71 per cent of the increased cost of the company's natural gas supply where the commission felt that the company could safely absorb approximately 29 per cent of the increased cost without jeopardizing its financial position, p. 15.

Reparation, § 17 — Increase in cost of purchased gas — Pendency of rate case.

4. A gas and electric company authorized to increase rates temporarily to cover the increased cost of purchased gas was directed to pass on to its cus-

tomers any refund received from the supplier after the final determination of the latter's rate structure by the Federal Power Commission, p. 17.

APPEARANCES: Lee, Bryans, Kelly & Stansfield, Denver, Colorado, by Ralph Sargent, Jr., Denver, Colorado, of counsel; and Wilfrid O'Leary, Attorney at Law, Cheyenne, by Vincent A. Ross, Attorney at Law, Cheyenne, appearing for petitioner, Cheyenne Light, Fuel and Power Company.

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By the COMMISSION: On January 13, 1954, Cheyenne Light, Fuel and Power Company, hereinafter sometimes referred to as the "company," filed with the commission, pursuant to Rule 11, Part II, of its Rules and Regulations, a petition for permission to file and place in effect on one day's notice to the public after the filing thereof a temporary rider to its tariff, Wyo. P.S.C. No. 2-Gas, to be designated as Seventh Revised Sheet No. 11 of said tariff, the effect of which will be to increase generally all of its rates and charges for natural gas service furnished to all of its consumers in Cheyenne, Wyoming, and the fringe area surrounding said municipality in the following amounts:

(a) All rates for residential and commercial natural gas service will be increased in the amount of \$.003 per one hundred cubic feet used per month, and

(b) All rates for interruptible industrial natural gas service will be increased in the

amount of \$.017 per thousand cubic feet of gas used per month.

The proposed emergency natural gas rate adjustment, if allowed, will affect the following designated tariff sheets of the company now on file with and approved by the commission:

Residential and Commercial Natural Gas

Service: Wyo. P.S.C. No. 2, Third Revised Sheet No. 4

Wyo. P.S.C. No. 2, Third Revised Sheet No. 5 Wyo. P.S.C. No. 2, Fourth Revised Sheet No. 6

No. 0
Interruptible Industrial Natural Gas Service:
Wyo. P.S.C. No. 2, Original Sheet No. 7
Wyo. P.S.C. No. 2, Second Revised Sheet
No. 9

Pursuant to notice duly given, said petition was heard by the entire commission in the commission hearing room, Supreme Court and State Library building, Cheyenne, Wyoming, on January 21, 1954. The appearances at said hearing are set forth above. On the date of said hearing and prior to the commencement thereof, the city of Cheyenne, through Philip White, its attorney, filed with the commission a written protest to said petition, objecting generally to the proposed increased rates and charges of the company for natural gas service to its customers within said city, "unless and until a clear and convincing showing of absolute necessity therefor is made to the commission"; however, said attorney did not appear at said hearing and no evidence was offered thereat by said municipality in support of its said protest. At the conclusion of said hearing, the commission took the matter under advisement.

The commission now having duly considered said petition, the evidence of record including post-hearing exhibits filed by counsel at its request, the statements, and representations made by counsel at said hearing, and being fully advised in the premises hereby enters its opinion, findings, and order herein, as follows:

Cheyenne Light, Fuel and Power Company is an operating public utility; and, as such, it is engaged in the business of generating and purchasing electric energy and the transmission, distribution, and sale thereof to the public within its certificated service area which includes the city of Cheyenne; the purchase, distribution, and sale of natural gas to the public within said municipality and the fringe area adjacent thereto; and the generation, distribution, and sale of steam for heating purposes to business establishments located in the main business area of said city.

The company is a Wyoming corporation; and, except for qualifying shares of stock held by the members of its board of directors, all of its outstanding capital stock is owned by the Public Service Company of Colorado, a public utility operating in the city of Denver and elsewhere within the state of Colorado. It purchases its entire supply of natural gas for resale, as well as so-called "boiler gas" which it uses

as fuel in the operation of its steam electric generating plant in Cheyenne, from Colorado-Wyoming Gas Company, Denver, Colorado, an interstate pipeline company, which is also a wholly owned subsidiary of the Public Service Company of Colorado. Colorado-Wyoming Gas Company, herein-"Colorado-Wyoming," after called purchases substantially all of its natural gas requirements from Colorado Interstate Gas Company which is also an interstate pipeline company. Public Service Company of Colorado also owns approximately 15 per cent of the common stock of this latter pipeline company. Both of said pipeline companies are subject to the jurisdiction of the Federal Power Commission.

The action taken by the company in filing its said petition herein was precipitated by an order adopted by the Federal Power Commission in its Docket No. G-2261 on December 29, 1953, authorizing the company's supplier, Colorado-Wyoming, to place in effect on January 1, 1954, negotiated increased rates and charges for natural gas furnished by it to its resale customers. The background of this FPC rate order is fully expanded in the petition of the company and the record and no useful purpose will be served by reiterating the history of same herein; however, it should be mentioned here that the rates which the Federal Power Commission thereby authorized Colorado-Wyoming to charge its resale customers, including petitioner herein, were predicated upon increased rates which it authorized Colorado Interstate Gas Company, hereinafter called "Colorado Interstate," to place in effect on said date by its interlocutory order issued De-

cember 22, 1953, in its Docket No. G-2260, pending final determination of rate proceedings initiated by Colorado Interstate therein; and that the same provides that in the event the Federal Power Commission shall enter an order in said docket, after hearing, directing Colorado Interstate to sell natural gas to Colorado-Wyoming at lower rates than those authorized by its said interlocutory order, then Colorado-Wyoming shall file a new rate schedule with said commission to reflect such lower rates; and that Colorado-Wyoming thereafter shall refund to its customers, which include petitioner, the difference between the lower rates reflected by said new schedule. if approved by said commission, and the rates charged them under said negotiated rate schedule approved by said commission on the date aforesaid.

The company, by its petition filed herein, requests that the commission allow it to place its proposed rate adjustment in effect until such a time as the Federal Power Commission makes a final determination of the rates of its said supplier, Colorado-Wyoming. It represents to the commission that, at that time, it will file with the commission new rate schedules reflecting the rates finally fixed by the Federal Power Commission for Colorado-Wyoming; and if the same are lower than those now being charged the company, it will pass on to its customers such refunds as it shall receive from Colorado-Wyoming as a result thereof, in a manner to be approved by the commission.

The company alleges that, based upon the amount of natural gas purchased by it from Colorado-Wyoming during the calendar year 1953, the

impact on it, resulting from approved increased rates of the latter, effective January 1, 1954, will be that during the year 1954, it will be required to expend \$77,761 more for its supply of natural gas, i.e., the operating expense of its gas department will be increased by said amount. It contends that it can absorb only 3.01 per cent of said amount (\$2,341); and it has designed its proposed temporary rate adjustment so as to pass on the balance thereof (\$75,420) to its natural gas consumers, i.e., same will increase its natural gas operating revenues by said amount.

The company states that this is an emergency proceeding; that it did not expect the Federal Power Commission to authorize increased rates and charges for its supplier prior to March 3, 1954; that it had only nine days' notice of the fact that its cost of gas would be increased on January 1, 1954; and that its earnings for the calendar year of 1954 have already been materially affected in that it has been required to absorb the entire amount of said increase since said date. The company points out that this proceeding is not a "full blown" rate case; that the aforementioned rider is not designed to improve its net earnings or its financial position; that the portion of the increased cost of its gas supply which it will absorb through its proposed rate adjustment will result in a decrease in its present earnings and rate of return; and that all it is asking by its petition herein is to be left in substantially the same position as it was prior to January 1, 1954.

[1] The company offered exhibits at the hearing through witness O. P. Reed, its acting manager, containing

WYOMING PUBLIC SERVICE COMMISSION

so-called "bare bones" figures and computations taken from its books and records revealing the actual operating results of its three departments and the operating results of the company as a whole for the calendar year 1953. This witness testified from exhibits offered and received in evidence as to what the operating results of the company and its gas department would have been if its supplier's increased rates and proposed rate adjustment had been in effect for said year; and what the impact on the operating results of the company and said department would have been if it had absorbed the entire amount of said increased cost of gas (\$77,761) during said year. Exhibits were also offered

and received in evidence through this witness showing what the operating results of the electric department of the company would have been for the year 1953 if it had been obliged to pay the increased rates of its supplier for natural gas used by said department as boiler fuel during said year. These exhibits show that the net earnings of the company and those of its various departments for the calendar year 1953, when related to a net investment rate base established for each of them (depreciated original cost plus materials and supplies and working capital), would have produced the following rates of return during said year under the following circumstances:

	Actual	Pass-on \$75,420 Incr. Cost	Company Pass-on to Firm Customers \$69,812 Incr. Cost	Company Absorb Total	Operations Proformed to Show Effect of Increased Cost of
	Operations	of Gas	of Gas	of Gas	Boiler Gas
Company Stm. Htg. Dept	6.66% 9.15%		6.57%	5.84%	
Electric Dept	6.60% 6.48%	6.38%		4.24%	6.50%

Considering the results of said exhibits, it appears that the company has made a prima facie showing that neither the company as a whole nor the gas department as a separate unit can absorb the total amount of the increased cost of its natural gas supply for the year 1954, and thereafter if the amount thereof is not changed, and continue to earn a reasonable rate of return on a net investment rate base.

We will now consider what amount of the company's increased cost of natural gas should be absorbed by it and the amount thereof, which, in our opinion, should be passed on to its customers. The company operates an

appliance department. The operations of this department are not divorced from its utility operations; and according to the evidence, the net profit or loss resulting from the sale of natural gas appliances is credited to the operating revenues or charged to the operating expenses of its gas department; and the net profit or loss arising from the sale of electrical appliances is likewise credited to operating revenues or charged to operating expenses of the electric department of the company. As indicated above, this is not a "full dress" rate case; and we hereby make no determination with respect to the manner in which the company should

operate its appliance department. We merely mention same primarily to show that we have considered the evidence pertaining thereto in arriving at our conclusions in this proceeding.

[2] The company has included in its rate base figures plant under construction and property held for future use. In determining the item of working capital used in its rate base figures, it has used therefor the sum of onetwelfth of its annual gas purchases and one-sixth of its annual operating expenses, less taxes and depreciation. In arriving at the income tax figures shown on its operating statements, it has used therefor the sum of its monthly accruals for income tax purposes. We again reiterate that this is not a full scale rate case; and we do not propose to determine herein the exact amount of what we consider legitimate components or elements of a rate base for the company and its respective departments. Nevertheless, we are of the opinion that the amount of working capital used by the company in its rate base figures is excessive, considering the amount of accrued taxes which the company does not have to remit for sometime after such accruals are made; and the fact that plant under construction and property held for future use are included therein.

We have prepared a conformed operating statement for the gas department of the company for the year 1953, using a pass-on of 1.7 cents per thousand cubic feet used per month to its interruptible industrial consumers, as this figure appears to be the actual increased cost of gas to the company, considering the differential in pressure involved in the purchase

thereof; and a pass-on of .21 cent per one hundred cubic feet used per month to its firm customers. In this statement, we have calculated the income tax for said department on the basis of same having been reduced to 47 per cent on April 1, 1953. We believe this method of calculating said tax will more accurately reflect the income tax liability of said department for the year 1954, as same will conform to our present income tax law. We do not believe we should predict or speculate as to what Congress will do with respect to future corporate income tax rates. We have also prepared a proformed operating statement for the electric department of the company for the year 1953, adjusted to show increased cost to the company of boiler gas used by said department, if the same had been in effect for said year: and using the same method of calculating its income tax liability. These statements follow: [See page 16.]

[3] Relating the net income figures as shown by said operating statements to net investment rate bases for said departments, set forth above, which include plant under construction and property held for future use and an item for working capital calculated by taking one-twelfth of the operating expenses of said departments for said year, as above calculated, less taxes and depreciation, we find that the company, under such circumstances, would have earned a rate of return for said year of 6.50 per cent on the operations of its gas department and 7.25 per cent on the operations of its electric department. Under these calculations, the company has absorbed \$22,385.16 of the increased cost of its supply of natural gas or 28.79 per cent there-

WYOMING PUBLIC SERVICE COMMISSION

OPERATING STATEMENT

Gas Department		
Gross Operating Revenue Operating Revenue Deductions: Operating Expenses Maintenance and Repairs Depreciation and Amortization Taxes (other than Income)	\$814,983.42 34,959.80 44,340.56 31,234.12	\$1,124,503.64
	\$925,517.90	\$925,517.90
Net Income before Income Taxes Income Tax		\$198,986.74 \$90,323.73
Net Income		\$108,663.01
RATE BASE		
Gas Department		
Net Plant Materials and Supplies Cash Working Capital	\$1,565,363.38 34,727.55 70,828.60	
Rate Base		\$1,670,919.53
OPERATING STATEMENT		
Electric Department		
Gross Operating Revenue Operating Revenue Deductions: Operating Expenses Maintenance and Repairs Depreciation and Amortization Taxes (other than Income)	\$962,079.15 73,334.73 88,735.96 54,216.16	\$1,540,534.10
	\$1,178,366.00	\$1,178,366.00
Net Income before Income Taxes Income Tax		\$362,168.10 \$169,058.56
Net Income		\$193,109.54
RATE BASE		
Electric Department		
Net Plant	\$2,471,977.92 103,700.41 86,284.49	
Rate Base		\$2,661,962.82

of; and it has passed on \$55,375.84 of said cost or 71.21 per cent thereof to its customers. We believe that the company can safely absorb this amount of the increased cost of its natural gas supply without jeopardizing its financial position with respect to its natural gas operations; that this determination is fair to all concerned; and that same lies within the realm of reasonableness.

We realize that under our calculations above set forth, there is a disparity between the rate of return for the three departments of the company, i.e., the rates of return for the electric and steam-heating departments of the company are higher than the calculated rate of return for its gas department. The company intends to perform considerable main-

tenance work upon the properties of said former departments which will result in increased operating expenses therefor. Considering this, we believe that the gas rate adjustment which we will order herein will not result in preferential or discriminatory treatment; and that the same will be fair and equitable to the company and its gas customers.

[4] As indicated above, the company assures us that it will pass on to its customers any refund received by it from its supplier, Colorado-Wyoming, resulting from the final determination of the latter's rate structure by the Federal Power Commission. In order that there will be no misunderstanding, our order herein will direct the company to allocate any such refund proportionately among its customers; and we will retain jurisdiction herein for the purpose of making such further order or orders in this proceeding with respect thereto as we shall deem necessary and proper.

Considering all of the evidence before us in this proceeding, we believe that said proposed rider is unjust, unreasonable, discriminatory, and preferential; and that the company should not be permitted to file same as a part of its said gas tariff. We further believe that the company should be allowed to file a rider to its said tariff:

(a) Increasing all of its rates and charges for residential and commercial natural gas service in the amount of \$.0021 per hundred cubic feet used per month, and

cubic feet used per month, and
(b) Increasing all of its rates and charges
for interruptible industrial gas service in the
amount of \$.017 per thousand cubic feet used
per month:

and our order herein will authorize the filing of such a rider to become effective one day after the filing of same.

We specifically find:

1. That the commission has jurisdiction over the subject matter of said petition:

2. That the proposed temporary rider of the company designated as Seventh Revised Sheet No. 11 of its tariff, Wyo. P.S.C. No. 2—Gas, which it seeks authority to file with the commission under its petition herein and place in effect on less than thirty days' notice is unjust, unreasonable, discriminatory, and preferential; and that said petition, in so far as it relates to the filing thereof, should be denied;

3. That the company should be permitted to file a new temporary rider to its said tariff designated as Seventh Revised Sheet No. 11 thereof, increasing its rates and charges for natural gas service furnished to the public within its service area in the following amounts:

- That said rider should become effective one day after the filing thereof;
- 5. That the temporary natural gas rate adjustment hereby allowed and hereinafter ordered is fair, just, reasonable, and nondiscriminatory;
- 6. That the company should be ordered to pass on proportionately to its customers any refund received from its supplier, Colorado-Wyoming Gas Company, after the latter's rates have been finally fixed and determined

WYOMING PUBLIC SERVICE COMMISSION

by the Federal Power Commission; and

7. That the commission should retain jurisdiction of this proceeding for the purpose of entering such further order or orders herein as may be necessary or proper in the premises.

It is therefore ordered, as follows:

1. That the petition filed herein by the company on the date aforesaid in so far as the same pertains to the filing of a proposed temporary rider by the company as Seventh Revised Sheet No. 11 of its tariff, Wyo. P.S.C. No. 2—Gas, to become effective one day after the filing thereof, and increasing its rates for natural gas service as therein set forth, be and the same is hereby denied;

2. That the company be and it hereby is authorized to file with the commission in accordance with its Rules and Regulations a new temporary rider to its said tariff, Wyo. P.S.C. No. 2—Gas, increasing generally its rates and charges for natural gas service furnished to the public in the city of Cheyenne, Wyoming, and

the fringe area adjacent thereto in the following amounts:

(a) Increasing all of its rates for residential and commercial natural gas service in the amount of \$.0021 per hundred cubic feet used per month, and

(b) Increasing all of its rates for interruptible industrial natural gas service in the amount of \$.017 per thousand cubic feet used per month:

3. That the company be and it hereby is ordered and directed to pass on proportionately to its customers any refund received by it from its supplier, Colorado-Wyoming Gas Company, after the latter's rates have been finally fixed and determined by the Federal Power Commission in a manner to be later approved by the commission;

4. That jurisdiction of this proceeding be and the same is hereby retained by the commission for the purpose of entering such further order or orders herein as may be deemed necessary or proper in the premises; and

5. That this order shall become effective as of the date hereof.

INTERSTATE NAT. GAS CO. v. SOUTH. CAL. GAS CO.

UNITED STATES COURT OF APPEALS, NINTH CIRCUIT

Interstate Natural Gas Company

v.

Southern California Gas Company et al.

No. 13373 209 F2d 380 December 29, 1953

A PPEAL by natural gas company from dismissal of action for damages resulting from pipeline's refusal to transport gas; affirmed. For lower court decision, see (DC Cal 1952) 94 PUR NS 321, 103 F Supp 317.

Procedure, § 10 — Effect of motion to dismiss.

1. A motion to dismiss has the effect of admitting all well-pleaded facts but does not admit facts which a court will judicially notice as untrue or facts which other documents in the proceeding establish to be unfounded, p. 21.

Rates, § 253 — Filing schedules — Contract filed.

2. A gas company has satisfied the requirement of filing schedules with the Federal Power Commission where a contract, in which it agrees to transport through its pipeline system natural gas belonging to another company, is on file with and approved by the commission and sets forth rates and terms on which the transportation of the gas would be made, in view of the fact that the statute requiring the filing does not designate that the schedule be in any particular form, p. 21.

Service, § 27 — Judicial action — Exhaustion of remedies.

3. Courts will not grant relief when one gas company fails to transport gas in interstate commerce for another pursuant to a filed schedule, until the Federal Power Commission has had an opportunity to pass on the important issues of fact which are committed to it by statute, p. 22.

Courts, § 19 — Jurisdiction — Damage claim — Conflicting jurisdiction of commission.

4. The questions as to whether public convenience and necessity requires that a natural gas pipeline company transport in interstate commerce gas belonging to another company, and, if so, how much and at what rates, and as to what facilities or service should be abandoned to accommodate the other company, are questions within the primary jurisdiction of the Federal Power Commission, and resort may not be had to the courts for damages for failure of one company to transport gas for the other until the remedies before the commission have been exhausted, p. 22.

Service, § 27 — Court action — Exhaustion of remedies.

5. A gas company has not exhausted its remedies before the commission so as to permit it to bring a court proceeding because a pipeline company has

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refused to transport natural gas pursuant to an agreement when no showing is made that the company has made a written complaint to the commission, since personal and oral requests, even if denied, are not sufficient, p. 23.

Procedure, § 29 — Action held in abeyance — Effect of dismissal on jurisdictional grounds.

6. Where a transportation contract action brought by a gas company against a pipeline company is dismissed for failure to exhaust administrative remedies, the appellate court will not require the trial court to reinstate the action and hold it in abeyance until such time as the administrative remedies have been exhausted, since a similar suit is easily initiated later if appropriate, p. 24.

Service, § 5 — Federal commission jurisdiction — Gas.

Statement that a natural gas company cannot avoid the primary jurisdiction of the Federal Power Commission over interstate transportation of gas by the simple expedient of refusing to file a schedule of rates for a proposed service, p. 23.

Service, § 118 — Contractual obligation — Conflict with certificate.

Discussion of the transportation obligation of a pipeline under a contract with a gas company for the transportation of that company's gas, where such contract conflicts with the terms of another contract and certificate obtained at the time of the construction of the pipeline, p. 23.

APPEARANCES: Guthrie, Darling & Shattuck, Milo V. Olson, Los Angeles, Cal., for appellant; T. J. Reynolds, L. T. Rice, Los Angeles, Cal., for appellee Southern California Gas Company; Milford Springer, Los Angeles, Cal., for appellee Southern Counties Gas Company; Pillsbury, Madison & Sutro, Turner H. McBaine, Thomas E. Haven, Byron E. Kabot, San Francisco, Cal., for appellees Southern California Gas Co. and Southern Counties Gas Co.

Before Stephens, Orr, and Pope, CJJ.

ORR, CJ.: Appellant sued for damages in the district court alleging a refusal by appellees to transport through its pipeline system natural gas belonging to appellant in violation of the Mineral Lands Leasing Act, 30 USCA § 185, the Natural Gas Act, 15

USCA § 717, and the Sherman Anti-Trust Act, 15 USCA §§ 1 and 2.

Appellees, pursuant to Rule 12(b) of the Federal Rules of Civil Procedure, 28 USCA, moved for dismissal of the action on the ground that, (1) the complaint failed to state a claim upon which relief could be granted, (2) because the court lacked jurisdiction over the subject matter of the action, and (3) that there was a failure to join indispensable parties. The trial court granted the motion to dismiss on the ground that primary jurisdiction was in the Federal Power Commission and that appellant had failed to exhaust its administrative remedies (DC Cal 1952) 93 PUR NS 390, 102 F Supp 685. Appellant filed an amended complaint which was also dismissed on the same ground (DC Cal 1952) 94 PUR NS 321, 103 F Supp 317. The pertinent allegations of the amended complaint are as follows:

[1, 2] Appellees own and operate a natural gas pipeline system constructed upon rights of way across permits government land under granted by the Secretary of Interior pursuant to provisions of the Leasing Act, 30 USCA § 185; that said act required appellees to operate its pipeline as a common carrier and appellees agreed in writing with the Secretary of Interior that its pipeline would be so operated; that appellees as a common carrier of natural gas were required to file rates with the Federal Power Commission and to transport gas for all shippers of natural gas at reasonable and nondiscriminatory rates; that from October 18, 1949, until October 25, 1950, appellant had natural gas which it desired to ship and sell in interstate commerce; that despite oral and written demands upon appellees to file such rates, appellees refused to do so, and, with the exception of El Paso Natural Gas Company, have at no time complied with the law. Further, it is alleged, that appellees justify their refusal to carry appellant's gas because of the provisions of a contract whereby Southern Counties Gas Company and Southern California Gas Company obligated themselves to purchase from El Paso Natural Gas Company 91 per cent of the pipeline capacity; that said contract was entered into for the purpose of monopolizing and restraining trade in violation of the Sherman Anti-Trust Act; that as a result of the alleged unlawful agreement and the refusal to transport appellant's gas, appellant was prevented from selling gas in interstate commerce and damaged in a substantial sum; and it is alleged, that it would be a futile and useless act for appellant to attempt to

invoke the aid of the Federal Power Commission because the failure to file a rate deprived the commission of jurisdiction; that appellant made numerous "personal oral requests" of the commission to require appellees to file rates as a common carrier, but was informed by officers of the commission that it had no authority to require appellees to do so. It is also alleged that in another matter relating to the issuance of a certificate of convenience and necessity to El Paso Natural Gas Company and other pipeline companies, appellant filed a petition in intervention requesting that as a condition to the issuance of the certificate the pipeline companies be required to file with the commission a common carrier tariff; that the commission refused to impose such a condition; and, in addition, it is alleged that appellees are estopped from claiming that appellant failed to exhaust its administrative remedies by their failure to do that which the law and their agreement with the Secretary of the Interior already required them to do.

Assuming, without deciding, that appellees were required to operate their pipeline system as a common carrier, we are of the opinion that the trial court correctly held that appellant was required to first seek relief from the Federal Power Commission before bringing an action in the district court.

The principle of primary administrative jurisdiction is well established by a long line of cases following Texas & P. R. Co. v. Abilene Cotton Oil Co. (1907) 204 US 426, 51 L ed 553, 27 S Ct 350. That doctrine has been applied consistently in cases arising under the Natural Gas Act and where, as here, the acts complained of are

alleged to violate the antitrust laws. Michigan Consol. Gas Co. v. Panhandle Eastern Pipe Line Co. (CA 6th 1949) 80 PUR NS 448, 173 F2d 784; Keogh v. Chicago & N. W. R. Co. (1922) 260 US 156, 67 L ed 183, 43 S Ct 47; Terminal Warehouse Co. v. Pennsylvania R. Co. (1936) 297 US 500, 80 L ed 827, 56 S Ct 546. Appellant concedes that it would be necessary to first resort to the commission before bringing an action in the district court if a rate had been filed, but argues that in the instant case there was no administrative question for the commission to determine because appellees refused to file a rate for the transportation of gas through their pipelines. To this contention we have two answers.

First, we think that appellees did in fact have the required schedule of rates on file with the commission. A motion to dismiss pursuant to Rule 12(b) of the Federal Rules of Civil Procedure, 28 USCA admits all wellpleaded facts, but does not admit facts which the court will judicially notice as not being true nor facts which are revealed to be unfounded by documents included in the pleadings or introduced in support of the motion. Nev-Cal Electrical Securities Co. v. Imperial Irrig. Dist. (CCA9th 1936) 85 F2d 886, certiorari denied (1937) 300 US 662, 81 L ed 871, 57 S Ct 493; Cohen v. United States (CCA 8th 1942) 129 F2d 733; Boice v. Boice (DC NJ 1943) 48 F Supp 183, affirmed (CCA3d 1943) 135 F2d 919. The amended complaint refers to the contract which appellees made for the carrying of gas through their pipeline. Certified copies of the contracts on file with the commission were

introduced in support of the motion to dismiss. These contracts, having the approval of the commission, disclose the rates and terms upon which transportation of gas through appellee's pipeline is made. We think the approval of the terms of the contract by the commission placed appellees in compliance with the requirements of § 4 of the Natural Gas Act, 15 USCA § 717c(c). This is especially so in view of the fact that 91 per cent of the capacity of the pipeline was to be utilized under the contract provisions. The statute does not exact that the "schedules showing all rates" shall be in any particular form but expressly states that it shall be in such form as the commission may designate. considering whether a natural gas company with but two large contracts had a schedule of rates on file, the court of appeals for the eighth circuit held that the company's contracts with its customers on file with the commission were schedules within the meaning of the Natural Gas Act. Mississippi River Fuel Corp. v. Federal Power Commission (CCA8th 1941) 40 PUR NS 213, 121 F2d 159.

[3, 4] Finding as we do that a rate was on file with the commission, if appellant thought it unfair, unreasonable, discriminatory, or otherwise unlawful, it should have first complained to the commission. United States Nav. Co. v. Cunard Steamship Co. (1932) 284 US 474, 76 L ed 408, 52 S Ct 247; Far East Conference v. United States (1952) 342 US 570, 96 L ed 576, 72 S Ct 492. Whether or not appellant can recover damages depends upon the solution of important issues of fact whose determination is by statute commit-

ted to an administrative body. As noted in the trial court's well-considered opinion (DC Cal 1952) 93 PUR NS 390, 102 F Supp 685, it is for the commission and not for the court to determine whether public convenience and necessity required appellees to transport any of appellant's gas; if so, how much and at what rates: and what facilities or services should be abandoned to accommodate appellant. Courts will not grant relief until the administrative body has had an opportunity to pass upon the practice complained of. Texas & P. R. Co. v. Abilene Cotton Oil Co. (1907) 204 US 426, 51 L ed 553, 27 S Ct 350; Midland Valley R. Co. v. Barkley (1928) 276 US 482, 72 L ed 664, 48 S Ct 342.

Second, the filing of a schedule of rates was not necessary to invest the commission with jurisdiction over the subject matter of the controversy. A natural gas company cannot avoid the primary jurisdiction of the commission by the simple expedient of refusing to file the schedule of rates required by § 4 of the Natural Gas Act, 15 USCA § 717c(c). If there be a failure to file a rate, the commission, as in the case of other violations of the act, is fully empowered by §§ 717m(a), 717d(a) and 717s, 15 USCA, to afford relief-upon its own motion or upon complaint. The same arguments advanced here by appellant were made and rejected by the Supreme Court in United States Nav. Co. v. Cunard Steamship Co., supra, 284 US at p. 486. It was there held that a failure to file contracts between shippers in accord with § 15 of the Shipping Act, 46 USCA § 814, did not deprive the shipping board of

primary jurisdiction. The logic of that opinion was reaffirmed in Far East Conference v. United States, supra, and is decisive here.

[5] The statement in the amended complaint that appellant made personal and oral requests of the commission to require appellees to file a tariff does not allege proper procedure. The rules of the commission require that complaints be in writing. Other allegations that appellant attempted to intervene in a collateral proceeding involving other parties are wholly irrelevant in the instant case.

Appellant's alleged cause of action based on the refusal of appellee to transport its gas is, in effect, a collateral attack upon an order of the commission. Appellant's real grievance concerns the contract made by appellees for carrying gas through their pipeline. We may take judicial notice of records and reports of administrative bodies. Greeson v. Imperial Irrig. Dist. (CCA9th 1932) 59 F2d 529; Fletcher v. Jones (1939) 70 App DC 179, 105 F2d 58, certiorari denied (1939) 308 US 555, 84 L ed 467, 60 S Ct 116. In doing so we observe that the construction of the pipeline here involved was based upon a 30-year contract whereby appellees obligated themselves to carry not only a minimum load factor of 91 per cent of the pipeline's capacity, but for its entire use if necessary. Re El Paso Nat. Gas Co. (1946) 5 FPC 115, 64 PUR NS 152. The commission, after a public hearing, issued a certificate of public convenience and necessity authorizing the construction and operation of the pipeline upon the terms of which appellant complains. Appellees are bound to conform to the pro-

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visions of that contract unless relieved by the commission. 15 USCA § 717c (d). They could not carry appellant's gas without violating their contract and the certificate of public convenience and necessity.1 The combination and conspiracy in restraint of trade, alleged in the amended complaint, is no more than criticism of appellees for conforming with the contract on file and approved by the commission. Appellant cannot, by means of this suit for damages, indirectly annul the action taken by the commission. Edward Chappell Co. v. Chesapeake & O. R. Co. (DC NY 1952) 110 F Supp 46, affirmed (CA2d 1953) 202 F2d 149; Watab Paper Co. v. Northern P. R. Co. (CCA8th 1946) 154 F2d 436.

[6] We are asked, in the event we hold that the suit should await exhaustion of administrative remedies,

to order the trial court to reinstate the action and to hold it in abeyance until such time as appellant has done so. In answer we think a statement contained in Far East Conference v. United States (1952) 342 US 570, 577, 96 L ed 576, 72 S Ct 492, 495, is appropriate:

"We believe that no purpose will here be served to hold the present action in abeyance in the district court while the proceeding before the board and subsequent judicial review or enforcement of its order are being pursued. A similar suit is easily initiated later, if appropriate. Business-like procedure counsels that the government's [appellant's] complaint should now be dismissed, as was the complaint in United States Nav. Co. v. Cunard Steamship Co. supra."

Judgment affirmed.

¹ Pipelines have a limited capacity and the Natural Gas Act forbids a natural gas company from abandoning any part of its facilities or services without permission from the commission. 15 USCA § 717f(b).

MISSOURI PUBLIC SERVICE COMMISSION

Re Central West Utility Company

Case Nos. 12,354; 12,419
Re Gas Service Company, Case No. 12,415
February 4, 1954

A PPLICATIONS by rival gas companies for certificate to serve the same area; each application approved in part. Order issued February 17, 1954, making order effective March 20, 1954.

Certificates, § 77 - Ability to serve - Gas service.

1. A gas company was denied a certificate to serve an unoccupied section of land where it was unable to show that it had a dependable supply of natural gas available for the new territory, p. 26.

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RE CENTRAL WEST UTILITY CO.

Certificates, § 91 — Rival applications — Gas supply.

2. One of two rival applicants for a certificate to render gas service in unoccupied territory was granted the authority where it appeared that the company certified had an adequate and dependable supply of gas to serve the area in an economically feasible manner, while the other company was unable to show that it had a dependable supply of gas, p. 26.

Monopoly and competition, § 41 — Gas service inadequacies — Basis for competition.

3. Identical authority will be granted to one utility to serve in the certificated territory of another if the application alleges and the proof shows that the utility presently rendering service has been unduly and persistently remiss or derelict in discharging the trust which it holds to provide adequate utility service, p. 30.

Constitutional law, § 17 — Due process — Gas competition.

4. In order to satisfy the requirements of due process of law, when one utility seeks to perform utility service in the area of another, it is necessary that the utility desiring to render service establish that the other company has been unduly and persistently remiss and derelict in discharging its trust, p. 30.

Monopoly and competition, § 44 — Scope of service — Basis for territorial invasion.

5. The allegation by one gas company that another company, in whose territory it desires to render service, is serving only a small part of its certificated area, does not indicate a wilful dereliction of duty warranting the authorization of the proposed territorial invasion, p. 30.

APPEARANCES: Jerry T. Duggan and Kyle D. Williams, for The Gas Service Company; Stinson, Mag, Thomson, McEvers & Fizzell, Dick H. Woods, and Lester G. Seacat, for The Central West Utility Company; William H. Norton, for the city of Gladstone; Thomas A. Johnson, for the public service commission.

Preliminary

By the COMMISSION: In this report and order The Gas Service Company will be called "Gas Service" and The Central West Utility Company will be called "Central West." Expansion plans of these rival natural gas retail distributors in the same general area have resulted in the filing of the above-entitled cases in the order listed, in each of which, as originally

filed, our authority was asked to serve in new or uncertificated territory.

Gas Service, a short time prior to the hearing, filed a supplementary application as an amendment adding into Case No. 12,415 slightly more than four sections of land which had been certificated to Central West many years ago. Central West opposes this attempt of Gas Service in Case No. 12,415 to invade its certificated area and it also opposes fully the objectives of Case No. 12,415 respecting the uncertificated areas as well. Service opposes Central West's Case No. 12,419 which asks for practically the same uncertificated territory as Gas Service asked originally in Case No. 12,415. The city of Gladstone intervened in support of Gas Service in Case No. 12,415, which, after the

amendment, includes both uncertificated and certificated areas.

At the request of Central West, and over the objection of Gas Service, the above cases were consolidated for the hearing, which, upon due notice to all interested parties, was conducted before the commission, en banc, in its hearing room in Jefferson City, Missouri, on September 28, 1953, at which appearances were made as above indicated.

Finding of Facts

Upon the evidence adduced we find the facts to be:

[1, 2] 1. Gas Service and Central West are corporations, incorporated, respectively, in the states of Delaware and of Kansas and are authorized to transact business in Missouri as public utilities. Both hold our certificates of convenience and necessity to provide, and both are providing, natural gas service in their respective well-defined areas which are contiguous to the territory here involved. Gas Service now serves some 124 communities (including Kansas City, Missouri) and has a full-requirements contract with Cities Service Gas Company for its gas supply which is contracted to continue until 1972. Central West is now rendering natural gas service in the environs of Liberty, Smithville, Glenaire, Claycomo, and elsewhere, in its territorial grant in Case No. 9771, hereinafter described. Central West obtains its natural gas supply from the Panhandle Eastern Pipe Line. This is, and has been, a dependable supply for its service in the territory certificated to it in that case.

2. Central West's ability to obtain a gas supply for expansion into new 3 PUR 3d

territory has not been so favorable. In Case No. 11,286, on June 25, 1948, we granted Central West a certificate to serve a portion of the area described in the pending Case No. 12,415, as originally filed. This expired two years later due to the grantee's failure to exercise the authority granted. Central West on April 24, 1950, in Case No. 11,898, asked a renewal of such certificate. This was denied by us on April 9, 1952, 96 PUR NS 439, mainly for the reason that it did not have a supply of gas sufficient to serve any additional territory. This territory involved in such Cases No. 11,286 and No. 11,898 is included in Central West's pending Case No. 12,419.

The evidence in this hearing does not satisfy us, nor are we able to find, that Central West at this time has a dependable supply of natural gas with which to expand into and to serve in the territory asked in its Case No. 12,419. This territory just mentioned lies beyond, is not to be confused with, Central West's certificated area of slightly more than four sections of land which, by the said amendment, Gas Service brought into its Case No. 12,415.

3. On August 17, 1939, in Case No. 9771, this commission granted to Central West a blanket certificate of convenience and necessity to construct, maintain, and operate gas distribution lines for furnishing gas service to prospective customers within an area approximately 14 miles long and 5 miles wide. Predominantly this was unincorporated rural territory in Clay county. In 1939 it had a gas transmission line extending southwesterly from Liberty, Missouri, for about 10 miles. The territory granted lay on

each side of such line and the blanket certificate enabled Central West to extend service to a few houses at a time in unincorporated subdivisions and settlements and to incorporated cities in the territory granted, without the necessity of coming to this commission for authority to make each extension.

Included in the area granted were the four sections and more of land which Gas Service now has added by amendment to its Case No. 12,415. This area is slightly in excess of four unbroken sections of land because it includes a narrow appendage of land extending therefrom for 11 miles from its southwest corner. Hereinafter we shall refer to it all as a unit in the use of the term "the four sections," unless otherwise indicated. In this 4-section area are the Englewood and Evanston unincorporated subdivisions in which some 375 homes are now being served natural gas by Central West. There was no evidence of any unsatisfied need therein. There also are four villages, Oakview, Oakwood Park, Oakwood, and Oaks, in this 4section area. They were incorporated after Central West obtained this territory in Case No. 9771 and before the incorporation of Gladstone.

4. An area now included in the incorporated city of Kansas City North was a part of the large area which was certificated to Central West in said Case No. 9771. Central West had entered the area and was serving therein prior to the incorporation of Kansas City North. Negotiations between these utilities resulted in Central West ceding the area to Gas Service by appropriate authorization orders from this commission. This area so

ceded lies immediately south of, and adjoins, this 4-section certificated area. After this was done Central West was obliged to expend \$33,000 to bring in a 6-inch gas supply line from the east to continue to serve the subdivisions of Evanston and Englewood. These subdivisions are unincorporated areas along the south side, and are a part, of the 4-section territory and are not within the territory so ceded.

5. The incorporated area of the city of Kansas City North adjoins the three of the four unbroken sections on the south and the extended appendage to such four sections on the east. U.S. Highway No. 169 extends in a straight line in a north and south direction from the city of Kansas City North and through both this area certificated to Central West and beyond through the uncertificated area asked in Case No. 12,415 as it was originally filed, a distance of some 5 miles. Suburban homes in great numbers have been constructed along this greatly improved highway and are occupied by families interested in obtaining gas service. At some points along this highway these improvements have not been extended laterally at any relatively great distances from the highway while at other points the reverse is true. There are more lateral expansions and more concentrations of homes in the Linden and Gashland communities, both in the uncertificated area. This also is true in the four incorporated villages and in the unincorporated subdivisions of Englewood and Evanston in the certificated 4-section area previously mentioned. Elsewhere in the 4-section area farm or suburban homes predominate which are separated in distance

by the size of the tract of land with which they are connected or associated.

6. After these three cases at bar were filed, or about November, 1952, the city of Gladstone was incorporated as a city of the fourth class. All or parts of twelve sections of land are within its established limits and constituting an area of about 8 square miles, drawn about equally from the uncertificated areas included in Cases No. 12,415 and No. 12,419 and the 4-section area previously certificated to Central West. Within its boundaries its population is about 2,000 people, many of whom live in farm or suburban homes. The Linden area is now included in Gladstone while the Gashland area is not. There are in being or in immediate prospect in this Gashland area about 400 homes and about 440 in that part of Gladstone not included in the four sections thereof already certificated to Central West.

Gladstone, on August 4, 1953, granted Gas Service a 20-year operating franchise which was approved at a special election by a vote of 444 in its favor and 6 against. Gladstone's officers prefer that only one gas company (and that Gas Service) should render service within the city.

7. When Gladstone was incorporated its established boundaries encompassed the incorporated villages of Oakview, Oakwood Park, Oakwood, and Oaks which then had, and now have, their own municipal officers and are functioning as incorporated villages. None of these villages have granted franchise to either of these two companies but some of their officers appear to be favorable to granting a franchise to Gas Service if it obtains their area in these proceedings. These

villages lie along and mainly on the east side of U. S. Highway No. 169 and, as previously stated, are within the area certificated to Central West in Case No. 9771 in the year 1939. Central West is not serving gas in these villages for the reason, as its officers put it, that there has not been a sufficient demand to warrant the expenditures of doing so. Such officers express a willingness to provide such service when the demand therefor justifies it as being economically feasible. Central West can reach and serve these villages by an extension of its present gas line which now serves the Evanston and Englewood subdivisions for a distance of a mile or less.

8. Gas Service could serve the four villages, if its supply line is laid from Kansas City North along U. S. Highway No. 169 as its officers testified its plan to be. Gas Service in its original application to serve uncertificated areas, alleged its purpose to be to extend this supply line from its facilities in Platte county "and elsewhere," and the supplemental application was silent on the subject. Thus Gas Service would be able to extend a gas supply line from Platte county to reach any of the uncertificated area which may be granted to it or from Kansas City North if all or any part of the certificated or 4-section area is granted to it. Gas Service estimated that it could extend service to the concentrated areas in all the territory here involved for \$264,000 and in its opinion it would be profitable to do so.

9. There is an urgent public need for natural gas service to consumers in the portion of presently uncertificated territory as set forth in the original application in Case No. 12,-

415, described as Sections 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, and 24 in Clay county, Missouri, and Sections 4, 9, 16, and north half Section 21 in Platte county, Missouri, all in Township 51, Range 33, and containing 154 sections. This last suggested portion of the territory would lie 11 miles on the east side and 21 miles on the west side of U. S. Highway No. 169 as it extends for 4 miles in a north and south direction through this 15½-section block. This suggested 15½-section area is growing and developing quite rapidly. It adjoins the east side of Gas Service's certificated area in Platte county. It is in the public interest that the present and future occupants of this 154-section block shall be provided with an adequate and dependable supply of natural gas and Gas Service is able to do this. It would be economically feasible as an investment.

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10. Respecting the area already previously certificated to Central West and as asked in the amendment to Case No. 12,415, it is sufficient to say that the need of a certificate of convenience and necessity therein was established before us in Case No. 9771 in 1939 when the area was certificated to Central West and it has never been revoked. The boundaries of Gladstone encompass this 4-section territory now certificated to Central West, including the incorporated villages of Oakview, Oakwood Park, Oakwood, and Oaks. Irrespective of whether or not such villages are legally incorporated into Gladstone, Gas Service in its amendment bringing this 4-section area into its Case No. 12,415, asked a certificate of convenience and necessity which, if granted, would include

the four villages because they are within the described boundaries of the territory asked in its supplementary application as an amendment to Case No. 12,415.

Opinions and Conclusions

In orders to follow we shall dismiss Central West's Case No. 12,354 as requested by it at the hearing, and its Case No. 12,419 for the reason that we have not been satisfied, nor were we able to find, that Central West has a dependable supply of natural gas with which to serve in its territory asked therein as an expansion of its present operations.

We shall grant Gas Service a certificate of convenience and necessity in its Case No. 12,415 covering the 15½ sections set forth in our findings of fact No. 9 and in our orders to follow.

This leaves for our consideration whether or not we shall grant Gas Service a certificate of convenience and necessity covering all, or any part, of the presently certificated territory of Central West which is described in the amendment made to Gas Service's Case No. 12,415 and previously referred to herein as the four sections. It constitutes practically the south half of the city of Gladstone.

Central West holds our certificate of convenience and necessity to serve the territory. Gas Service asks us to grant it a like certificate covering the same territory, on these theories as summarized in its brief:

- 1. Central West has failed and refused to serve all but a small portion of its certificated area here involved, and
 - 2. The authority sought by Gas

Service in its supplemental application, if granted, would involve only a remote possibility of competition in the area served by Central West.

The pleadings of Gas Service make no such charges. Only the supplemental (or amended) application mentions Central West, and in doing so said:

"Petitioner is informed that Central West Utility Company is the holder of a certificate of convenience and necessity issued by this commission authorizing said company to provide natural gas service to the area described in Paragraph IV supra; but that a relatively small portion of said area is receiving service from said company." (Paragraph IV is territory in controversy.)

[3, 4] That allegation does not attempt to meet the requirements of this commission, often expressed in our cases, to the effect that we will not hesitate to grant identical authority to a utility to serve in the same certificated territory of another utility if the application alleges, and the proof shows, that the utility in the area has been unduly and persistently remiss or derelict in discharging the trust which it holds to afford the utility service.

The principle just stated and containing our suggested procedure was quoted without criticism by the Kansas City court of appeals in the case of Peoples Teleph. Exchange v. Public Service Commission (1945) 239 Mo App 166, 58 PUR NS 226, 186 SW 2d 531, 535, wherein our report and order in Case No. 10,296, in Re Peoples Teleph. Exchange (1943) 26 Mo PSC 413, 51 PUR NS 6, was affirmed. We hardly see how anything short of such course should be taken, procedur-

ally, when one utility seeks a certificate to perform the same utility service in the area of another utility whose certificate is outstanding, otherwise due process of law would hardly be met.

Once this course is taken, we can then determine whether or not we shall grant the later application and permit the resulting competition if it will serve the public interest. State ex rel. Electric Co. v. Atkinson (1918) 275 Mo 325, PUR1919A 343, 204 SW 897; State ex rel. Consumers Pub. Service Co. v. Public Service Commission (1944) 352 Mo 905, 54 PUR NS 71, 180 SW2d 40, 44; State ex rel. Sikeston v. Public Service Commission (1935) 336 Mo 985, 8 PUR NS 452, 82 SW2d 105. Or we then would be able to determine whether, in the paramount public interest, we should revoke the earlier certificate for wilful and persistent dereliction of duty and grant the later applicant a monopoly under regulation.

[5] It is undisputed that Central West is serving all consumers in Evanston and Englewood who desire gas service and that the service is adequate. That this is the only portion of its 4-section certificated area here involved which it is actually serving, in and of itself, does not indicate a wilful dereliction of duty warranting the proposed invasion of its certificated territory. The management of Central West takes the position that it is willing to extend its service further into certificated area as demands therefor may arise to such a degree as to make it economically feasible to do.

This pretty well expressed the common conception of the duty of utilities respecting "blanket authority." Too much reliance upon that concept may

invite abuses to the detriment of the public interest, still, nonetheless, it is within our regulatory power by order, after a hearing on due notice to the utility, to require it to furnish adequate service to meet unsatisfied needs in its certificated territory when it is economically feasible to do so. Disobedience of such an order by the utility could result in losing or sharing its territory, for if the utility is unwilling to obey such an order neither this commission nor the courts should protect it in its attempt to reserve a certain area unto itself. State ex rel. Kansas City Power & Light Co. v. Public Service Commission (1934) 335 Mo 1248, 8 PUR NS 192, 76 SW2d 343, 353. On the other hand a utility desiring our authorization to serve in the certificated area of another, and against its will, must make a like showing of wilful dereliction on the part of the certificated utility and under such a procedure as was suggested in Peoples Telephone Exchange, supra.

The only charge in the pleadings herein which Central West was called upon to meet in order to avoid the consequences of losing its certificated territory here involved or sharing it with another, was that only a relatively small portion of the certificated territory of Central West is receiving service. This falls short of any charge of wilful dereliction of duty by this utility. As much might be charged against any other utility holding blanket territorial authority, in a city or elsewhere, and where the area is not saturated with service.

Entertaining these views, it is, therefore,

Ordered: 1. That Case No. 12,354,

filed by The Central West Utility Company on May 1, 1952, be and the same is hereby dismissed.

Ordered: 2. That Case No. 12.419, filed by The Central West Utility Company on August 29, 1952, be and the same is hereby dismissed.

Ordered: 3. That subject to the requirements provided in Ordered 4 hereof The Gas Service Company be and it is hereby granted a certificate of convenience and necessity for the construction, maintenance, and operation of a gas distribution system and to operate said system for the purpose of furnishing gas service to the public, located in Sections 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, and 24 in Clay county, Missouri, and Sections 4, 9, 16, and the north half of Section 21 in Platte county, Missouri, all in Township 51, Range 33, and containing 15½ sections out of the land included and described in its original application in Case No. 12,415, and The Gas Service Company be and it is hereby denied authority to serve in all other areas set forth in said original application than the 15½-section area above stated, and is also denied the authority to serve in all areas set forth in its supplemental (or amended) application filed in Case No. 12,415 on August 13, 1953.

Ordered: 4. That as to those portions of the above-described territory granted in Ordered 3 hereof wherein The Gas Service Company does not have the local franchises and permits, the certificate of convenience and necessity in that respect will be a preliminary one subject to becoming final and effective within those areas upon the filing of proof with the commission that it has obtained said

MISSOURI PUBLIC SERVICE COMMISSION

necessary franchises and permits from the proper authorities.

Ordered: 5. That said transmission lines and distribution systems shall be constructed, maintained, and operated in a reasonably safe and adequate manner so as not to endanger the safety of the public or to interfere unreasonably with the service of other public utilities.

Ordered: 6. That this order shall

take effect fifteen days after the date hereof, and that the secretary of this commission shall forthwith serve on all parties interested herein a certified copy of this report and order, and that the applicant shall notify the commission in the manner prescribed by § 386.490, RS Mo 1949, whether the terms of this order are accepted and will be obeyed.

Clamp Type Connector



High Compression Connector

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POWER CONNECTORS

Whatever your requirements there is a Delta-Star connector designed specifically to do the job. Never is there any necessity of adapting a connector to your particular application; there is available at Delta-Star the exact connector you require in clamp or solder type with all the characteristics that have won such general acceptance throughout the industry.

Delta-Star clamp type connectors incorporate the three essential requirements of positive electrical and mechanical connection, ease of installation, and continuity of service over long periods of time.

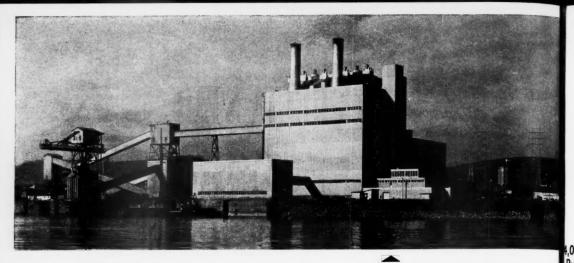


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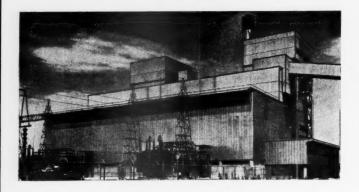


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Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



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Offices in Principal Cities

Q-Panel walls grace the new Elrama Plant (above) near Pittsburgh. It was de by Duquesne Light Company's Engin and Construction Department. The I Corporation was General Contractor.

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Q-Panel walls (above) go up quickly i any weather because they are dry an hung in place, not piled up.

More than 32,000 sq. ft. of Q-Panels were to enclose the impressive Hawthorn S Electric Station (left) of the Kansas City, souri, Power and Light Company. Ebaso vices, Inc., designed and built the plant.



Please send a free copy of your Q-Panel Catalog.

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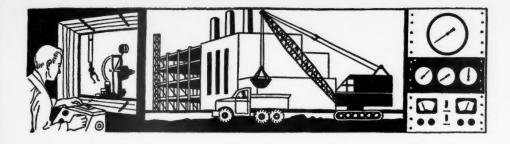
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Industrial Progress

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e plant.

LIC Service Electric and Gas pany, Newark, N. J., plans to dapproximately \$84,000,000 on ruction in 1954, according to Lyle onald, chairman of the board. A 185,000 kw turbine generator is built at Burlington station and are under way for a new electric ating station at Linden, N. J., to an initial capacity of between 00 and 450,000 kw.

the gas department, Mr. Mcld said, construction expendiin 1954 will include continuaof the extension of large mains burban areas and the installation clic catalytic reforming units at al gas manufacturing plants.

s House Heat Shipments Rise in 1st Quarter

PMENTS of gas-operated house ng equipment continued to forge I of last year during the first er of 1954, according to the Gas iance Manufacturers Associa-

ward R. Martin, GAMA's direcof marketing and statistics, red that total shipments for all types of gas central heating ment—furnaces, boilers and conon burners—numbered 135,500 during the first three months of year as compared with 132,500 g the same period of 1953.

s-fired furnace shipments led the ing with 100,600 units, a 7.9 per increase over the total for the quarter of last year—93,200.

ipments of gas-fired boilers num-1,500 for the first quarter comwith 1953's total of 10,600 for ame three months, a drop of 10.4 ent. However, March boiler ships reached 3,600 units, 600 above

7. 1954-PUBLIC UTILITIES FORTNIGHTLY

February's total, but below the 4,200 shipped in March of last year.

Gas-operated conversion burners followed a pattern similar to that of boilers, with 25,400 shipped during the quarter as compared with 28,700 during the same three months of last year, an 11.5 per cent loss. March conversion burner shipments amounted to 7,900 while 11,300 units were shipped during the same 1953 month.

GAMA's estimates are based on a telegraphic survey among members of its house heating division and expanded to represent the entire gas house heating industry.

"Pipeline Progress"

A NEW, colorfully illustrated brochure, "Pipeline Progress," describing forty-five years of pipeline installation work is now available.

The brochure contains photographs showing actual pipeline installations for many and varied projects in all parts of the country. The text tells how the C. N. Flagg Company, from a small beginning in 1905 in the resi-

dential plumbing field, has now progressed to the point where they employ 200 people and are exclusively engaged in laying pipelines for utilities, municipalities, industrial organizations, large institutions, state-wide natural gas projects and complete petroleum installations.

A free copy of "Pipeline Progress" may be obtained from the C. N. Flagg Company, Inc., Meriden, Connecti-

AGA Awards to Honor Gas Industry Achievements

APPLICATIONS are being considered for five major gas industry awards, honoring individuals and companies, to be presented by the American Gas Association for technical achievements, bravery and home service. Prizes will be given to winners at the AGA 36th Annual Convention in Atlantic City, N. J., October 11th-13th.

For the most outstanding contribution to advance the gas industry, the

(Continued on page 24)

We are pleased to announce that

MR. PAUL F. CLARKE

(formerly Vice President of The Chase National Bank)

is now associated with us in our

Public Utilities Department

LEHMAN BROTHERS

May 11, 1954.

AGA Distinguished Service Award will go to an individual. Since having been established in 1929 this award, comprising an engraved certificate and substantial sum of money, has become the gas industry's most coveted honor. It has been given for progress made in such diversified fields as labor-saving accountancy; strengthening and extending industrial use of gas; dealer co-operation; development of manufactured gas production processes; public relations; change-over from one kind of gas to another, and research. Nominations must be received by August 1st.

The third annual AGA Distribution Achievement Award, sponsored by the American Meter Company, will go to the person judged to have made the most outstanding contribution to the science and art of gas distribution anytime during the past five years. Entries are due by May 31st.

The sole author of the best technical paper presented at an AGA meeting or printed within the year

beginning and ending October 1st may qualify for the Beal Medal.

Heroism also is honored. The AGA Meritorious Service Award recognizes bravery in saving life or conserving property in a gas plant, works or enterprise connected with handling or distributing industry products, from July 1, 1953, to June 30, 1954. Conspicuous judgment, intelligence on heroic action must have been manifested by the winner. Entries, on a special form available from AGA, must be postmarked by August 1st.

On the home front, the AGA Home Service Achievement Award encourages outstanding advancements of modern homemaking through promoting interest and better domestic use of gas and modern gas equipment. This multiple award, sponsored by "McCall's Magazine," can be won by directors or individual members of AGA member gas company home service departments during the year ending July 31st.

Honors will cite two home service

directors, one of Division A has a department staffed by more five, and the other of Division B h ing a department comprising a than five persons. Three awards be made in Division C recogni individual members or a depart head in the home service departs of three different companies.

Requests for application forms further information, as well as pleted entries, should be address the American Gas Association, Lexington Avenue, New York N. Y.

Paul F. Clarke Associated With Lehman Brothers

LEHMAN Brothers, invest bankers, announced recently that F. Clarke, formerly a vice pres of The Chase National Bank, ha come associated with the firm in public utilities department.

Mr. Clarke joined The Chase

(Continued on page 26)

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This announcement is neither an offer to sell nor a solicitation of an offer to buy these securities.

The offer is made only by the Prospectus.

New Issue

210,000 Shares

Niagara Mohawk Power Corporation

Preferred Stock, 4.10% Series
(\$100 par value)

Price \$100 per share

(Plus accrued dividends, if any, from May 13, 1954)

Copies of the Prospectus are obtainable from only such of the undersigned and such other dealers as may lawfully offer these securities in the respective States.

Harriman Ripley & Co.

The First Boston Corporation

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Glore, Forgan & Co.

Goldman, Sachs & Co.

Kidder, Peabody & Co

Lehman Brothers

Merrill Lynch, Pierce, Fenner & Beane

Smith, Barney & Co

Stone & Webster Securities Corporation Union Securities Corporation White, Weld & Co. May 5, 1954.

Good News: n A hea

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REAKERS at the March, 1954 meeting of the INTERSTATE POWER CLUB were John B. Taylor, v.p. of Atlantic City Electric Company, W. Wyman, manager of industrial sales, Cleveland Electric Illuminating Co., John H. MacNeal, Consolidated Edison Co., club sident, Walter H. Sammis, president of Ohio Edison Co., and J. M. Stedman, general sales manager of Penna Power and Light Co.

ALL THE TALKS at a recent meeting of the nterstate Power Club in New York showed ow industrial sales can improve the net livisible of power companies.

M. Stedman emphasized the need for creaive selling in the industrial market: "Any business that fails to engage in creative elling is signing its own death warrant." ohn B. Taylor told how his company studied he effect of certain new loads upon the anhual load curve of his company. Result: hey know, rather accurately, the value of different types of new business.

R. W. Wyman described a well-planned sales program, in which magazines, manufacturers' literature, meetings, and many, many alls are combined in an unusually effective way: "Selling more in '54."

Walter H. Sammis said, in part: "Total industrial man-hours drop off during depressed business conditions. However, I wish particularly to call your attention to the fact that the kilowatt-hours consumed by manufacturing industries per man-hour increase during such times. This would seem to substantiate the feeling that the completely electrified manufacturing plants are the ones that continue to operate in times of business declines. . . .

"We know that the completely electrified plant is the low-cost plant that keeps operating year in and year out, but it is up to us to see that our customers know it. It is time to dust off the production methods analysis section of the E.E.I. Power Sales Manual and apply the principles it contains."

and Today's Kusiness

Martin Publications - 20 No. Wacker Dr., Chicago 6



Tough Digging in Close Quarters

IN PORTLAND, MAINE, the soil in many places can be downright troublesome, with large stones and boulders mixed in with smaller stones and gravel, a combination that makes tough digging. Add to this the fact that trench lines in many places run right along-side rows of trees, poles and other obstructions and you've got a really mean job of trenching.

Yet this CLEVELAND Model 95 "Baby Digger" is moving right along on the job—as shown by the discharge from the conveyor—coming through with the same dependable performance that has made it an outstanding favorite for over 30 years.

This is the kind of job where CLEVE-LAND'S famous multi-speed transmission really pays off, enabling the operator to select the *right* combination of power and speed for the particular job condition from more than 30 available combinations of digging wheel and crawler speeds.

The "Baby Digger's" compactness and maneuverability also played important parts in completing this job right on schedule in spite of numerous obstructions. The large boulders deposited to the left of the trench in the photo show that good use was also made of CLEVELAND'S reversible conveyor on this job.

Write for descriptive bulletins and specifications, or get the full story on CLEVELANDS from your local distributor.



INDUSTRIAL PROGRESS (Continued)

tional Bank in 1930 upon his gration from Dartmouth College, tially assigned to the personnel partment he was transferred to public utilities department of the in 1935. He was elected second president in the public utilities department in 1950 and subsequently a president.

Ebasco Appoints Reilly Chief Appraisal Engineer

JOHN J. REILLY has been apported chief appraisal engineer of Ele Services Incorporated, the complex announced. Mr. Reilly suc W. M. Black who has been apported to such that the such th

In his new position Mr. Reilly be responsible for the supervision preparation of engineering valuat and depreciation studies, the

nouncement stated.

Pipeline Projects Planned to the Northern Natural Gas acks

A 1,500 foot span across the Miss river to carry two 30-inch natural pipelines will be started this sum the Northern Natural Gas Comp has announced.

ter

The job is part of the \$52,000 construction work Northern plans year. Another project will be a of 27 miles of pipe from Palm booster station to the river.

Lone Star Gas to Spend \$20,000,000 on Expansion

LONE Star Gas Company, Da Texas, expects to spend about \$ 000,000 this year for additions to plants, gathering and transmissystems, compressor stations and expand gas and oil producing perties, according to D. A. Hipresident.

A total of \$27,500,000 was spent the same purpose in 1953.

F. W. Bush, R. O. Bell Nam To New A-C Positions

APPOINTMENT of Fred W.I as assistant to the vice president charge of transformer and switch equipment at Allis-Chalmers Magacturing Company has been nounced by J. W. McMullen, president in charge of transformend switchgear equipment.

Announcement was also made the assignment of Raymond 0.1 to the transformer and switchgear ganization to handle special assignents.

(Continued on page 28)

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"Our new Dodge truck is a better deal for me and for my boss, too!"

r new Dodge en appoint b-Rated" trucks have r. Reilly ved a better deal nandling ease, visibility, nfort and power. You, can save time and ney, work and effort anned his these great new l Gas cks. Find out today the Miss y Dodge means a ter deal all around!





GET-A Better Deal In Steering! p 39° turning angle and short wheelacing proceedsign make Dodge the sharpest turn-A. He brucks on the road. That saves you time!



YOU GET-A Better Deal In Seeing! Big 951 sq. in. windshield of Dodge cab is largest of any popular truck. All-around visibility is tops, too, for safer driving.



YOU GET-A Better Deal In Sitting! The 16-inch-high Dodge seat is deep and comfortable enough to be in your living room! Plus easy-to-reach controls and dispatch box.



UGET—A Better Deal in Power! You on maintenance because every Dodge ine...V-8 or Six...has such long-life wes as exhaust valve seat inserts, ne-plated top piston rings and posiressure lubrication.

New Dodge trucks give A BETTER DEAL FOR THE MAN AT THE WHEEL-and a better deal for the man who pays the bills. Test-drive and learn how a Dodge makes driving easier and does more work in less time. Give your Dodge dealer a call. He'll be glad to show you.

"Job-Rated" TRU

TUNE IN: "Break the Bank," Sunday TV-"The Roy Rogers Show," Thursday radio-"Make Room for Daddy," Tuesday TV.

U. S. Rubber Issues Book on Insulated Wire and Cables

A 140-page, illustrated book containing engineering references and descriptions of insulated wire and cables made for the electric utility industry has been prepared by the electrical wire and cable department of United States Rubber Co.

The new book contains chapters on the company's insulation compounds, jacket compounds, service cables, street-lighting cables, power cables, control cables, power and lighting wires and cables, bare and weatherproof wires and cables, portable cords and cables and insulated aluminum conductors. Complete descriptions, including

engineering data, are given on each product.

A copy of the book can be obtained, without charge, by writing to the electrical wire and cable department, United States Rubber Co., 1230 Avenue of the Amer-

icas, New York 20, N. Y.

\$6,400,000 Expenditure Planned by Pacific Power & Light

PACIFIC Power & Light Company, Portland, Oregon, will spend approximately \$6,400,000 on construction during the current year, according to an estimate by Paul B. McKee, president of the company.

This compares with construction expenditures of \$12,646,936 in 1953 and \$23,190,684 in 1952.

Of the 1953 outlay \$6,589,160 went for the completion of the Yale dam, \$4,774,108 for electric distribu-

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tion facilities and the remainder for other system a tions and improvements.

Transit Industry Sets Safety Record

AN all-time industry record of more than one bil passenger miles operated during 1953 for each passen fatality was reported recently by the transit compa of the nation.

The new low eclipsed by a considerable margin previous record set in 1952. In that year, one senger fatality occurred for each 750,000,000 passen

miles operated.

Marking the 1953 achievement, 21 companies throu out the United States and Canada were honored in N York recently as winners in the annual Ameri Transit Safety Award competition. Silver plagues w presented to the following companies:

Kansas City Public Service Co., Kansas City, M

Group 1, serving over 600,000 population. San Diego Transit System: Group 2, serving 250

to 600,000 population. Nashville Transit Co., Nashville, Tenn., and So

Carolina Electric & Gas Co., Columbia, S. C.: Group serving 100,000 to 250,000 population.

serving 30,000 to 100,000.

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LON C. HILL Power Station, Central Power and Li Company's new plant near Corpus Christi, will be d bled in size by early 1956.

J. L. Bates, CPL vice president and general manag announced that a second 66,000 kilowatt general unit has been ordered and that actual construction the plant addition will begin early next year.

The new station went into service early last mon increasing South Texas' power supply by 66,000 kg watts or 88,000 horsepower. Installation of a second unit of the same size will increase the net capability the plant to 132,000 kilowatts ,176,000 horsepower) enough electricity to supply a city of 400,000 people

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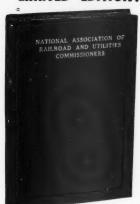
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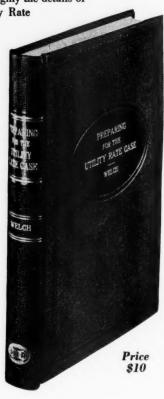
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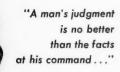
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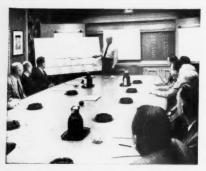
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